IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF OHIO EASTERN DIVISION

:

KEVIN D. HARDWICK,

Plaintiff, : Case No. 2:18-cv-01185

:

V.

3M COMPANY; DYNEON, LLC; : Judge Edmund A. Sargus, Jr. **E. I. DU PONT DE NEMOURS AND** :

COMPANY; THE CHEMOURS : Chief Magistrate Judge Elizabeth

COMPANY; ARCHROMA MANAGEMENT : A. Preston Deavers LLC; ARKEMA, INC.; ARKEMA FRANCE, :

S.A.; AGC CHEMICALS AMERICAS, INC.; :
DAIKIN INDUSTRIES LTD.; DAIKIN :

AMERICA, INC.; SOLVAY SPECIALTY

POLYMERS, USA, LLC,

Defendants.

:

DEFENDANTS' JOINT OPPOSITION TO PLAINTIFF'S MOTION FOR CLASS CERTIFICATION

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B. Plaintiff Hardwick Works With and Sells PFAS-Containing Product
C. Hardwick Files This Lawsuit—
D. Without Offering Experts, Hardwick Wants a Court-Ordered Science Panel of Experts to Study Every Kind of PFAS
ARGUMENT
Without any expert support, Plaintiff moves for certification of a mandatory (non-opt-out) nationwide class of 330 million people to litigate state-law tort claims seeking novel medical-monitoring and scientific-study relief regarding 5,000 different kinds of substances. Plaintiff's motion cannot withstand the required "rigorous" review, see Wal-Mart Stores, Inc. v. Dukes, 564 U.S. 338, 348 (2011), and should be denied for a host of reasons. (I.A) The proposed class litigation is the opposite of cohesive and, indeed, (I.B) raises no common classwide questions. (II) Plaintiff does not request the kind of classwide "final injunctive relief"

required under Rule 23(b)(2). (III) The class is not defined in an adequate or ascertainable way. (IV) Plaintiff, a firefighter who used and sold certain PFAS-containing products, is not a typical or adequate class representative. (V) And certifying the proposed class would violate the Constitution in several distinct ways.

I. HARDWICK FAILS TO MEET RULE 23(B)(2)'S COHESIVENESS 23(A)'S LESS REQUIREMENT OR **EVEN** RULE

The proposed class does not satisfy the cohesion requirement of Rule 23(b)(2), a requirement more rigorous even than predominance. Different members of the 330million-person putative class are subject to different state laws and present different, outcome-determinative facts. Whether one class member is entitled to relief against one or more Defendants under the state law applicable to that putative class member's claims says nothing about whether the same is true of another class member. At bottom, there is cohesion-precluding variation in (1) the state law applicable to various putative members' claims (2) the class members themselves, and (3) additional issues such as the defenses available against different class members.

1. State-law variation: The nationwide real	ach of the proposed class destroys
any possible cohesiveness	

The common-law claims asserted on behalf of this proposed nationwide class will be subject to the widely different laws of at least all fifty States on a host of critical issues. (In an appendix to this brief, Defendants submit tables to illustrate these state-law differences.) Under Sixth Circuit authority, nationwide classes with this much state-law variation cannot be certified. *See, e.g., Pilgrim v. Universal Health Card, LLC*, 660 F.3d 943, 946–49 (6th Cir. 2011); *In re Am. Med. Sys., Inc.*, 75 F.3d 1069, 1085 (6th Cir. 1996).

The putative class members present different facts on every material element of the claims asserted on their behalf. Their ability to prove their case thus hinges on a bevy of individual factors—ranging from the type and amount of PFAS to which a class member was exposed; to the timing, location, sources, and means of exposure; to each class member's demographic, health, and lifestyle circumstances; to the connection between a class member's PFAS exposures and the conduct of Defendants (and non-Defendants); to the different conduct and knowledge of different Defendants at different times. Again here, many decisions—including several involving PFAS—have rejected class certification based on the presence of these individual issues. *See, e.g., Ball v. Union Carbide Corp.*, 385 F.3d 713, 727–28 (6th Cir. 2004); *In re Welding Fume Prods. Liab. Litig.*, 245 F.R.D. 279, 309–11 (N.D. Ohio 2007); *Wilson v. Brush Wellman Inc.*, 817 N.E.2d 59, 65–66 (Ohio 2004); *Rowe v. E.I. du Pont de Nemours & Co.*, 2008 WL 5412912, at *9–22 (D.N.J. 2008); *Rhodes v. E.I. du Pont de Nemours & Co.*, 253 F.R.D. 365, 374–80 (S.D. W. Va. 2008); *Palmer v. 3M Co.*, 2007 WL 1879844 (Minn. Dist. Ct. Jun. 19, 2007).

Additional issues—such as choice-of-law, statutes of limitations and repose, contributory negligence, comparative negligence, assumption of risk, and the government-contractor defense—raise further individual questions that likewise destroy cohesiveness. *See, e.g., Georgine v. Amchem Prods., Inc.*, 83 F.3d 610, 626-27 (3d Cir. 1996), *aff'd*, 521 U.S. 591 (1997).

Plaintiff focuses on commonality rather than cohesion, even though cohesion is a harder standard to meet. But Plaintiff cannot satisfy even commonality. None of Plaintiff's purportedly common questions promises common *answers*, as they must. *See Dukes*, 564 U.S. at 350. Nor does Plaintiff's case law support class certification. Those cases involved far smaller classes based on releases of one or two substances from a single facility in a single community—not, as here, thousands of different substances from countless facilities, products, and more, across millions of people throughout the entire country.

This class separately cannot be certified under (b)(2) because the requested injunctive relief, apparently consisting of some sort of medical monitoring and scientific study, neither is adequately specified nor is classwide final injunctive relief.

Plaintiff bears the burden, under (b)(2), of showing that he seeks "final injunctive relief" that applies to "the class as a whole." Fed. R. Civ. P. 23(b)(2). Plaintiff has failed that burden here, because he has not laid out any details of the relief requested. He has refused to answer Defendants' questions about the relief, leaving Defendants and the Court to speculate what medical monitoring or any science panel would look like. This Court cannot certify a class when it cannot know that the class in fact seeks *uniform injunctive relief across the class*.

To the extent the Court can make out what exactly Plaintiff seeks, it does not satisfy (b)(2)'s requirement for *classwide final injunctive relief*—for two separate reasons. *First*, the relief does not apply uniformly to each of the 330 million putative class members. Any sort of medical monitoring would necessarily be individualized, given the extraordinary number of substances involved and the class members' varying circumstances. And the same is true of any sort of nationwide study of the 5,000 substances involved. This lack of a *single injunction* across the class precludes certification. *Second*, and at any rate, the relief is not "final" but is expressly intended merely to be the starting pointing for further litigation seeking damages.

The party moving to certify must "sufficiently define the class," but Plaintiff has not done so. *Brown v. Worthington Steel, Inc.*, 211 F.R.D. 320, 326 (S.D. Ohio 2002) (Sargus, J.). He has not "specif[ied] a particular group that was harmed during a particular time frame, in a particular location, in a particular way," making his class definition overbroad. *Id.* Nor is his definition adequate, including because: (i) it is *impossible* to test for PFAS at blood concentrations as low as Plaintiff proposes (0.05 part per *trillion*); (ii) the testing required would force hundreds of millions of people to submit to blood draws at specialized labs; (iii) it is unclear what each laboratory would be testing *for*, because the "any other PFAS" on which class membership is conditioned is not defined; and (iv) the whole endeavor would cost *at least \$198 billion* on a classwide basis, merely to determine class membership. All of this requires denial of the motion on grounds separate from "ascertainability," *see*, *e.g.*, *Romberio v. UnumProvident Corp.*, 385 F. App'x 423, 433 (6th Cir. 2009), although the class fails the separate ascertainability requirement too.

IV.	HARDWICK IS NEITHER AN ADEQUATE NOR A TYPICAL PLAINTIFF 60
	Mr. Hardwick satisfies the requirements of neither typicality nor adequacy because: (A) resolving his claims does not necessarily resolve all others' claims; (B) he is subject to unique defenses; (C) he has certification-precluding conflicts with other class members; and (D) he lacks the knowledge and control needed to vigorously pursue the class claims.
	A. Hardwick Fails Typicality Because Resolving His Claims Does Not Necessarily Resolve Other Class Members' Claims
	The vast differences in the 5,000 substances at issue, the pathways of exposure, and the types of putative class members— —mean that Plaintiff could, in
	theory, "prove his own claim but not necessarily have proved anybody else's claim." Beattie v. CenturyTel, Inc., 511 F.3d 554, 561 (6th Cir. 2007) (quotation omitted). Typicality is thus not satisfied. See, e.g., Mays v. LaRose, 951 F.3d 775, 793–94 (6th Cir. 2020); Am. Med. Sys., 75 F.3d at 1082.
	B. Hardwick Fails Typicality Because He Is Subject To Unique Defenses
	Plaintiff is subject to "possible defense[s] applicable only to him or a subset of the class that includes him, [meaning he] cannot establish typicality." 1 McLaughlin on Class Actions § 4:18 (17th ed. Oct. 2020 update) (collecting cases). Defendants have unique defenses against Plaintiff because of his work as a firefighter,
	and his job as a salesman, even at the present, of firefighter foam and other PFAS-containing products, among other things.
	C. Hardwick Fails Adequacy Because of His Conflicts with the Putative Class
	A class representative "cannot adequately protect the class if his interests are antagonistic to or in conflict with the objectives of those he purports to represent." <i>Rutherford v. City of Cleveland</i> , 137 F.3d 905, 909 (6th Cir. 1998) (citation omitted). That is the case here—in at least four real-world ways: (1) Plaintiff contends he has no present symptoms of any disease he links to PFAS, but other putative class members would; (2) Plaintiff seeks research, but others would want money or other forms of
	relief; (3) and (4) Plaintiff sold PFAS- containing products to putative class members who may have claims against him. This massive putative class also raises the possibility of claim splitting. Plaintiff thus fails
	adequacy. See, e.g., Amchem Prod., Inc. v. Windsor, 521 U.S. 591, 626 (1997).
	D. Hardwick Fails Adequacy Because of His Lack of Knowledge of His Case 69
	Plaintiff cannot vigorously pursue the claims on behalf of the class, which independently defeats adequacy, because he is uninformed about the facts and fundamentals of his case. Plaintiff appears to be a mere "puppet[] for class counsel." <i>In re AEP ERISA Litig.</i> , 2008 WL 4210352, at *2 (S.D. Ohio Sept. 8, 2008).

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TABLE AND SUMMARY OF EXPERT REPORTS

(Exhibits 1–5)

Dr. Dominik Alexander (Exhibit 1), an epidemiologist, evaluates Plaintiff's proposal for a nationwide study of the health effects, if any, associated with roughly 5,000 different PFAS. He explains why, from an epidemiological perspective, a nationwide study of PFAS is infeasible, improper, and unnecessary. He also explains that the *Leach* Settlement Science Panel assessment cannot serve as a model for such a study. Studying the potential health effects of each of the thousands of different PFAS across a nationwide population would require a much more rigorous and ultimately infeasible methodology than that used by the *Leach* Settlement Science Panel to assess PFOA exposures. And the *Leach* Settlement Science Panel neither addressed causation nor in many instances used a methodology equipped to do so. Given the inherent methodological limitations of the proposed nationwide study and the considerable work already being performed to investigate PFAS health effects by other researchers, Plaintiff's proposed study program will not advance the science.

Dr. Barbara Beck (Exhibit 2), a toxicologist who specializes in human health risk assessment, explains why individualized assessment is necessary to evaluate the health risk, if any, to putative class members from exposures to PFAS. She describes the enormous variation in the sources, transport, exposure media, and human receptors for the various PFAS in the environment. And she explains how variation in factors such as age, gender, body mass, occupation, diet, race, and behavior can affect PFAS intake and result in variability in dose, demonstrating the need for individualized assessment of intake to evaluate the potential health risks, if any, to an individual from exposure to PFAS. Separately, she evaluates variability in serum concentrations of PFAS across and within different populations, as well as variation in factors that potentially influence the toxicity of different types of PFAS. Her analysis demonstrates that a reliable characterization of health risk (if any) for any particular individual from exposure to PFAS requires an assessment of the particular PFAS to which the individual was exposed, along with the exposure, dose, and risk parameters specific to that individual. These parameters will vary significantly across members of the proposed class.

Dr. Jessica Herzstein (Exhibit 3), an environmental and occupational medicine physician and expert in medical monitoring, explains why Plaintiff's apparent request for classwide medical monitoring is inappropriate and contrary to generally accepted principles. Dr. Herzstein first explains the purpose of medical monitoring, and the importance of numerous individualized considerations in the determination of how *and* whom to monitor for latent health effects of environmental exposures. Dr. Herzstein then addresses Plaintiff's failure to adhere to the generally accepted principles of medical monitoring. In particular, Plaintiff adopts a misguided definition of the proposed class (one that fails to identify a population at increased risk for adverse health effects due to exposure), fails to consider the harms that can result from class-wide medical monitoring, and fails to define the elements of his proposed medical-monitoring program, which renders a meaningful assessment of the propriety of classwide adjudication impossible.

Dr. Maureen Reitman (Exhibit 4), an expert in polymer chemistry and materials science, opines on the characteristics of the thousands of compounds covered by Plaintiff's broad definition of "PFAS." According to Dr. Reitman, PFAS are diverse in structure, properties, and behaviors, making it inappropriate to treat any, let alone all, "PFAS" compounds as interchangeable. Dr. Reitman further opines that the complex network of entities involved with marketing, developing, distributing, selling, manufacturing, releasing, training users in, producing instructional materials and/or otherwise handling and/or using one or more of the thousands of PFAS is far broader than the companies named as Defendants in this action.

Dr. Dallas Wait (Exhibit 5), an expert in organic, environmental, and analytical chemistry, opines on serious problems with Plaintiff's proposed class-definition criteria that all class members have a concentration of at least 0.05 part per trillion (ppt) of PFOA and at least 0.05 ppt of another undefined "PFAS" in their blood serum. Current analytical capabilities do not allow reliable measurements of PFOA or any other PFAS in blood serum at such low levels. And there are no known methods that would allow reliable detection and quantification of levels in serum for many of the PFAS that fall within Plaintiff's sweeping definition of that term.

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INTRODUCTION

Plaintiff has set out the most ambitious class imaginable:

"[A]ny individual residing within the United States at the time of class certification for one year or more since 1977 with 0.05 parts per trillion (ppt) or more of PFOA and at least 0.05 ppt or more of any other PFAS in their blood serum."

Motion for Class Certification (ECF 164, "Mot.") at 1.¹ By Plaintiff's calculation, this would include approximately 330 million people, a number roughly equal to the entire population of the United States. *See* Memorandum In Support of Motion for Class Certification (ECF 164, "Mem.") at 38 n.10. The class claims would implicate exposures to any of 5,000 or so distinct chemicals regardless of the chemicals' individual characteristics, the countless potential third-party sources of them, the identity of the thousands of companies potentially tied to them, or any given class member's individual circumstances of exposure.

The vast ambition of the motion, however, is in stark contrast to the paucity of support for it. The motion does not offer a single expert report—none for the assumed and unexplained proposition that the 0.05 parts per trillion level of chemicals in blood is detectable or that such a level would be meaningful if it were detectable; none for the assumed and unexplained proposition that there is an additive or synergistic relationship between PFOA and every other PFAS, which forms the basis of the class definition; none for the unexplained assumption that it is even possible or feasible to conduct a cross-study of 5,000 chemicals for every person in the country; none for anything. Beyond the absence of experts, the motion is often at odds with the testimony and stated desires of the plaintiff himself. A motion for class certification, and particularly one of such unprecedented size and scope, needs to rest on more than the imagination of counsel, however creative or ambitious.

¹ "PFAS" refers to the 5,000 or so different per- and polyfluoroalkyl substances, one of which is "PFOA," which stands for perfluorooctanoic acid.

But the motion's predicates, including all the assumed and unexplained propositions enumerated above, are not just unsupported; they are *impossible*. The 0.05 ppt standard of detection, as just one example, is 2,000 times lower than Centers for Disease Control ("CDC") detection limits for any PFAS; no laboratory can detect 0.05 ppt. And even if the CDC detection limits were used, the cost of merely determining class membership, before even addressing liability, would be disqualifying.

which would equate to \$198 billion on a class-wide basis (even assuming, against fact, that laboratories in the United States were equipped to handle 330 million PFAS detection tests).

The very idea of a nationwide class for these claims is likewise impossible under controlling Rule 23 authority. A Rule 23(b)(2) class must be "cohesive," and the proposed class is the opposite of that. Plaintiff's claims arise under state common law, and under Ohio choice-of-law rules, the law of the State where any particular class member was allegedly injured would govern the class member's claims. Yet the laws of the States are wildly diverse on substance, claims, defenses, remedies, and more. As to medical monitoring, to take just one example, some States require anyone seeking monitoring to have present illness, which Mr. Hardwick admittedly lacks. Many other States' laws do not recognize a medical-monitoring remedy at all. And even among the States that do, many impose a predicate that members of any medical-monitoring class have significantly greater risk of some serious latent disease than the general population—the antithesis of Plaintiff's theory, under which virtually everyone would be entitled to medical monitoring no matter their demonstrated risk, if any.

State-law differences present only one of the disqualifying cohesion problems, as the proposed class litigation would also be beset by a welter of individual questions that preclude any

class cohesion. Putative class members would have different exposures to different types of PFAS; at different levels; linked in whole or in part to different Defendants (and non-parties); at different times; in different places; through different methods of exposure. And each of these differences is material. The thousands of chemicals that this proposed class action would embrace, to take just the issue of biopersistence, are often vastly different—some having half-lives measured in years, others in hours, others not detectable in blood, and others still having no bioavailability at all. As Plaintiff would have it, all of these substances would be lumped together in one massive case, all without any science, and certainly none offered by Mr. Hardwick, to support their aggregation. Putative class members would also have very different health and personal circumstances. As a result, different class members would have different evidence on medical monitoring, negligence, battery, injury, causation, and other crucial issues, involving different subsets of Defendants and non-parties. There is no common evidence that could establish any class member's right to the requested (but unspecified) medical-monitoring, scientific-study, or declaratory relief, let alone any Defendant's liability for such relief.

Plaintiff tries to minimize his proposed class and requested relief as "nothing new." Mem.

2. But he is being modest. There is no precedent for a nationwide class of 330 million people, relating to exposure to 5,000 distinct chemicals, involving numerous Defendants and countless unnamed third parties. It would be a first in the annals of American legal history. The few cases certifying a class relating to PFAS instead involved emissions of one or two PFAS from a particular localized facility allegedly affecting a single community by creating localized exposures. And the *Leach* Settlement Science Panel could not be further afield from the relief requested here: that panel arose out of a negotiated contractually agreed-upon settlement, conducted a limited assessment rather than a nationwide study, involved one PFAS compound, focused on a population

that included some persons exposed at significantly higher levels than in other communities, and determined any "probable links" under the lower threshold specifically defined in the parties' contract rather than the more demanding general-causation standard of toxic-tort law. The *Leach* Settlement Science Panel is simply inapposite—and is not precedent for what Plaintiff seeks here.

Nor has Plaintiff shown any *need* for such an unprecedented use of the judicial power. The study of PFAS is a complex and evolving science that is being pursued by numerous subject-matter experts, including government bodies and regulators. Mr. Hardwick may be dissatisfied with the pace or outcome of these efforts. But that is no basis for the breathtaking ask made here—for a federal court to use the judicial power to displace federal, state, and local public-health officials, as well as the broader scientific and public-health community, in determining what potential studies and monitoring should be conducted on behalf of virtually all Americans.

Beyond all of these problems—the lack of cohesion, the absence of any class-wide final injunctive relief, the unworkable and unsupportable class definition, the unprecedented nature of the proposed class and requested relief—the sole plaintiff, Mr. Kevin Hardwick, is an inadequate and atypical class representative, all the more so in a mandatory (non-opt-out) class of virtually every American. His view of the case and the remedies he desires depart significantly from those put forth by his counsel and those favored by other would-be class members; his exposures, including his highly particularized potential exposures due to his career as a firefighter, and there are

exceptional and unique defenses available against him.²

² To be clear, Plaintiff will not be able to sustain the merits of his individual claim against any defendant based on any alleged PFAS exposure he might claim. Nothing in this Opposition should be read to suggest otherwise—and Defendants will raise those defenses to Plaintiff's claim at the appropriate time. For current purposes, however, class certification is improper because the facts

As class representative, Mr. Hardwick's trial would be dispositive of the claims for all class members, which is to say all Americans. But few class members would be subject to the same potentially withering cross examination as Mr. Hardwick. In one of Mr. Hardwick's two full-time jobs, as a professional firefighter, he has worked with, among other things, aqueous film-forming foam (AFFF) (which can include as a constituent component certain types of PFAS), often getting covered with it. It is primarily due to that alleged exposure that Mr. Hardwick alleges liability against the eleven Defendants for having done any one or more of ten different things:

"marketed, developed, manufactured, distributed, sold, released, trained users on, produced instructional materials, and/or otherwise handled and/or used PFAS materials . . . in such a way as to result in the contamination of Plaintiff's and the other class members' blood and/or bodies."

Plaintiff's First Amended Class Action Complaint, ECF No. 96 ("Am. Compl.") ¶ 27.

In his other full-time job, Mr. Hardwick is a salesman for a fire equipment company. There, he is engaged in exactly the conduct he challenges in others. He demonstrates AFFF to potential purchasers, trains others in its use, promotes it, and, with full knowledge of its PFAS composition, *sells AFFF on commission*. The opportunities for cross examination that his trial would present, and the unique defenses he would face, disqualify him as one on whose trial the fortunes of 330 million others should rest.

Every potential class member has a unique medical history and a unique level and combination of chemicals in his blood, but Mr. Hardwick's circumstances are particularly atypical.

and evidence that would be at issue in Plaintiff's own merits examination are different than those at issue for any other putative class member's claim.

So we are left with this: The class-certification motion seeks a study of thousands of chemicals to which the sole plaintiff has not been exposed for illnesses he does not have and for which he is not being monitored.

The relief Plaintiff seeks on behalf of 330 million Americans also creates a host of class-certification-precluding problems. To take just one, a gulf exists between Mr. Hardwick's sworn testimony and the motion papers filed on his behalf about the nature of the requested court-ordered science panel. Throughout this case, Plaintiff's counsel has insisted that Mr. Hardwick's claims are justiciable because the findings of the science panel would be more than precatory; that the panel's findings would, on a disease-by-disease basis, establish or disestablish general causation for subsequent personal-injury actions. Mr. Hardwick, however, would not be comfortable with any of that. He wants *nonbinding* relief that will give him "knowledge" and satisfy his curiosity and fear. Dep. 133:17–21. Other than that he wants *nothing*. Mr. Hardwick has thus clarified that he does not support the relief requested by his counsel—and that his own case is non-justiciable.

Last but not least, the proposed class litigation would trample a multitude of additional constitutional principles. Article III, the Seventh Amendment, and the Due Process Clause all foreclose class certification here.

Plaintiff's motion has provided no basis upon which the requested class, the most aggressive in American history, should be certified. This Court should deny it.

BACKGROUND

A. The Differences Among Substances Known As "PFAS."

To say that someone has "PFAS" in their blood barely begins to tell their story, really not much more than saying that they have one (or more) of potentially thousands of "substances" in their blood. The substances known as PFAS consist of approximately 5,000 different chemical compounds, which have vastly different chemical properties and compositions and come from vastly different manufacturing processes, intermediates, products, and sources that have varied over time.³ The expert reports that accompany this brief (Exhibits 1–5) tell a more complete story, but here is a summary:

1. Variability of the PFAS compounds at issue.

PFAS is a broad term encompassing a large array of organic molecules containing fluorine and carbon. A subset of these compounds contains a chain of between 4 and 16 carbons that are fully bonded to fluorine atoms and one of a large variety of other chemical groups, depending on the particular type of the thousands of types of PFAS. The properties of PFAS depend, in part, on the carbon chain length, the degree of fluorination, and the particular functional groups that are present.⁴

In part because of these different carbon chain lengths and functional groups, there is substantial variability in the compounds that make up PFAS and the properties of those 5,000 or

³ Ex. 4, Expert Report of Dr. Maureen Reitman ("Reitman Rep.") at 3; OECD (Organization for Economic Co-operation and Development). Summary report on the new comprehensive global database of Per- and Polyfluoroalkyl Substances (PFASs). Publications Series on Risk Management

No.

39,

2018,

http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ENV-JM-MONO(2018)7&doclanguage=en.

⁴ Reitman Rep. 4–8 (discussing the different chemical properties); Ex. 2, Expert Report of Dr. Barbara Beck ("Beck Rep.") at 15 (discussing the differences in bioaccumulation, biopersistence, and half-lives).

so PFAS.⁵ Based on what is known so far, certain PFAS have the potential to persist in certain organisms. These kinds of PFAS have what is known as a long "half-life"—the time required for half of the total amount of a chemical to be eliminated from the blood, assuming there is no ongoing exposure.⁷ But while some PFAS may have half-lives of years, others have half-lives measured in hours or days.⁸ More than different half-lives, the 5,000 different kinds of PFAS also have different clearance rates (i.e., the rate at which a chemical can be removed from blood by metabolism or excretion). And they have different "distributions" (i.e., the transfer of a chemical throughout the body across different biological compartments). This variability in distribution rates can also result in variability in serum concentrations, if any, across different PFAS and across species, sexes, doses, and life stages. 10

The upshot of this PFAS science—the substantially different half-lives, clearance and distribution rates, and targets, if any, of the 5,000 or so different PFAS—is that the toxicity characteristics, if any, of one particular PFAS compound cannot be relied on to make scientific assumptions about the toxicity characteristics of any other PFAS compound.¹¹ The science instead

⁵ Beck Rep. 14–15, 46.

⁶ Beck Rep. 14.

⁷ Beck Rep. 40–41.

⁸ Beck Rep. 44 (Table 7.3), 47 (Table 7.4).

⁹ Beck Rep. 40–44.

¹⁰ Beck Rep. 38, 40.

¹¹ Beck Rep. 46 ("My analysis demonstrates that the extent and magnitude of variability across factors that influence PFAS exposure and dose is such that individualized assessments would be required to perform a scientifically reliable assessment of exposure, dose, and risk of PFAS across proposed class members."); see also EPA, PFAS Action Plan (Feb. 2019) at 13 ("While many of the same effects are observed for the family of PFAS chemicals, it appears that different adverse effects may be dominant in different PFAS"); NIH, PFAS Conference Highlights Research Obstacles (Sept. 2019) ("The fact that there are more than 4,700 PFAS complicates matters for researchers. A one-size-fits-all approach to understanding them will not work").

says that each PFAS must be studied individually; experts cannot make categorical determinations about the potential health risks associated with all PFAS, or even a large class of PFAS.¹²

2. The myriad potential pathways of exposure to PFAS.

Making generalizations more difficult is that there is a plethora of potential pathways of exposure to these 5,000 different compounds, some of which have been around since the mid-20th century.¹³ Defendants do not account for all the PFAS and PFAS-containing products that have been produced by thousands of non-parties.¹⁴ In addition to Defendants, there are myriad other sources of PFAS and PFAS-containing products (both domestically and globally), and PFAS manufactured abroad by non-parties has been and continues to be imported into the United States.¹⁵

For the alleged 330 million people with PFAS detectable in their blood (in exceptionally minute and unmeasurable amounts for many), there are millions of stories with respect to the pathways of exposure. The surfactant properties of certain PFAS—e.g., stability, and oil-, water-, stain-, and soil-repellent capabilities—have rendered those types of PFAS useful in an enormous range of products. To take a few examples, certain PFAS may be used in the manufacture of certain medical devices and pharmaceuticals; food packaging; building materials; home-use products (e.g., paper plates, liners for ovens and trays); home-maintenance products (e.g., cleaners, paints, varnish, floor polish, and insecticides); personal-care products; stain-resistant, water-repellent, and fire-repellent apparel and textiles; and other miscellaneous products, such as

¹² Beck Rep. 5, 44.

¹³ Beck Rep. 4, 23; *see also* Reitman Rep. 3.

¹⁴ Reitman Rep. 12–13.

¹⁵ Reitman Rep. 12 (citing, among other authorities, a 2012 publication identifying Chinese manufacturers of PFOS).

¹⁶ Beck Rep. 20–28.

¹⁷ Reitman Rep. 6–7, Beck Rep. 13–14; 20–21; NIH, Per- and Polyfluoroalkyl Substances (PFAS), available at https://ntp.niehs.nih.gov/whatwestudy/topics/pfas/index.html (discussing the ability of certain PFAS to reduce friction, thereby making them useful in a variety of industries such as aerospace, construction, electronics, and automotive).

batteries, car waxes, and ski waxes.¹⁸ Various PFAS have also been used in manufacturing and industrial processes.¹⁹ And especially notable here, AFFF, a kind of foam used by firefighters to put out certain hard-to-control fires, may contain PFAS.²⁰

3. Variability of individuals exposed and health effects.

As a result of the variety in types of PFAS and means of exposure over time, toxicologists and epidemiologists attempting to evaluate a potential link between exposure to a given PFAS compound and any potential health issues must account for a variety of individualized factors. ²¹ Another set of factors differentiating putative class members is the vast differences in the health and health risks of the U.S. population, which unless accounted for in any study are potential confounders of any observed association. ²²

An individual's potential risk, if any, for adverse effects from any given chemical (PFAS or otherwise) varies widely across the population. Some of the critical, individual-specific considerations include exposure level, intake, body mass, age, gender, and health and medical history. Toxicologists evaluate individual-specific variability using two lenses. First, toxicologists evaluate any changes that a particular individual may undergo throughout his or her lifetime. These include physical changes (e.g., body weight and age) and behavioral changes (e.g., ingestion rates and proximity to PFAS source). Second, toxicologists evaluate the differences

¹⁸ Beck Rep. 21–22; see also Reitman Rep. 9 ("myriad consumer products").

¹⁹ Beck Rep. 23.

²⁰ Beck Rep. 24. For a more detailed explanation of the various firefighting foams used over the years that contained PFAS, see Beck Rep. 23–24.

²¹ Beck Rep. 16 ("Quantifying PFAS exposures is particularly challenging due to the multitude of PFAS compounds in various sources, which amplifies the variability in potential exposures. Understanding exposure variability is key to understanding the likelihood that an individual or group of individuals may be at elevated risk from a chemical exposure[.]"); Ex. 1, Expert Report of Dominik Alexander ("Alexander Rep.") at 6–7.

²² Alexander Rep. 10, 15-16 & App'x A, C.

among individuals within a population (e.g., age, gender, occupation, diet, race, behavior, health conditions, and water intake rate) that may also impact potential PFAS risks.²³

So in the end, any given individual's story with respect to PFAS depends on (i) the types and levels of PFAS detectable in their blood, if any; (ii) their routes of exposure; and (iii) their individual health circumstances, including age, health risks, and lifestyle. All of these individual issues must be factored into any study to determine any toxicological effect, if any, of any PFAS on any given person.

Plaintiff Kevin Hardwick Works With and Sells PFAS-Containing Products. В.

The individual who takes center stage in this case is Plaintiff and purported class representative Kevin Hardwick—

Though he has not used it himself since 2013, Hardwick has worked with and extensively trained others in the use of AFFF, and he both uses and demands that others use firefighting personal protective equipment that he believes contain PFAS because he understands there is no PFAS-free substitute. 25 He spent half of his career at the Cincinnati/Northern Kentucky

²³ For this paragraph, see Beck Rep. 30.

²⁵ Dep. 177:6–178:11.

International Airport Fire Department,²⁶ where AFFF was regularly used to put out fuel fires.²⁷ In fact, at least until 2018, the FAA *required* airports like the one Hardwick worked at to store and use AFFF.²⁸ Hardwick used AFFF once a week during his approximately 20-year tenure at the airport,²⁹ sometimes so much so that he "just got covered in the stuff."³⁰ Despite his familiarity with AFFF, Hardwick admitted that he never reviewed any Material Safety Data Sheet for an AFFF product, and he could not identify any manufacturer or brand name of the AFFF he used. Dep. 12:11–21; 73:6–9; 248:16–23.

Hardwick did not just use AFFF and products containing PFAS, either; he also sold them on commission, profiting from each sale. He worked as a sales manager at Ferrera Fire Apparatus, Inc. from 2002 to 2014, where he sold fire trucks, turnout gear, firefighting equipment—and AFFF. In 2008 alone, he sold 200 gallons of AFFF to the Cincinnati/Northern Kentucky International Airport.³¹ And he has not stopped selling PFAS-containing products since. From 2016 on, he has sold for Finley Fire Equipment Co., which also sells firefighting gear and equipment containing PFAS.³²

In addition to using and selling PFAS-containing products, Hardwick has also trained others in the use of PFAS-containing products such as AFFF.³³ He has conducted trainings "across

²⁶ Ex. 7 (Pl's Resps. to Arkema) at No. 3.

²⁷ Dep. 211:21–212:4.

²⁸ FAA, ARFF Research Facility, available at https://www.airporttech.tc.faa.gov/Airport-Safety/Aircraft-Rescue-Fire-Fighting/-ARFF-Research-Facility.

²⁹ Dep. 211:21–212:4.

³⁰ Dep. 157:18–158:7.

³¹ Dep. 93:8–94:19.

³² See id.; November 17, 2016 Employment Agreement; Finley Fire, About Us, available at https://finleyfire.com/about-us/ ("[W]e have a sales force of over 30 sales representatives who undergo continuous training and are available for onsite demonstrations and training [sic].").

³³ Dep. 92:21–93:10.

the country," for example, in the use of trucks that spray AFFF into the environment.³⁴ Since bringing this lawsuit, Hardwick says he tells customers and other firefighters that there may be unspecified risks of AFFF and other PFAS-containing products, and, warning or not, he continues to sell and promote AFFF and PFAS-containing personal protective gear, earning a commission on every sale.³⁵

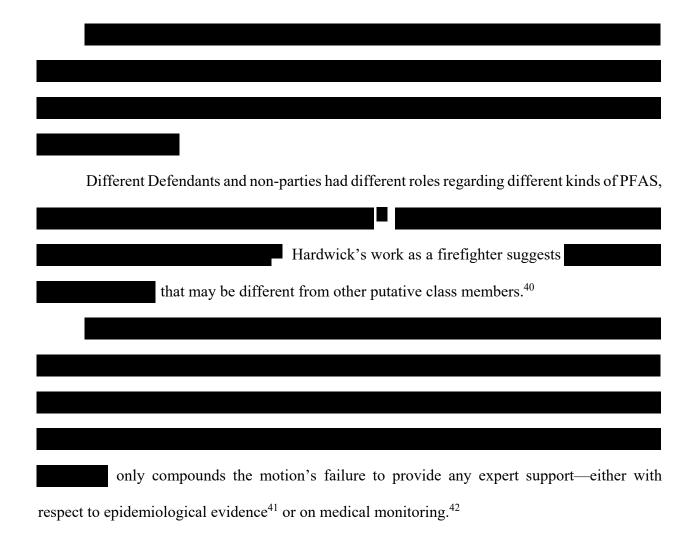
C. Hardwick Files This Lawsuit—

When Hardwick filed this lawsuit, he alleged that he "now has one or more PFAS materials in his blood serum." ECF No. 1 ("Compl.") ¶ 4.

³⁴ See Ex. 7 (Pl's Resps. to Arkema) at No. 3 ("Responsible for sales and service training and education for fire departments in Ohio, Kentucky, and Indiana. When Hardwick started at Ferrera, he sold fire apparatus, turnout gear, and firefighting equipment. After a couple of years, Hardwick began to focus on fire apparatus. Hardwick provided sales, training, maintenance, and demonstrations of fire trucks to departments across the country.").

³⁵ Dep. 95:2–10; 96:12–97:1; 42:10–23.

³⁶ 37



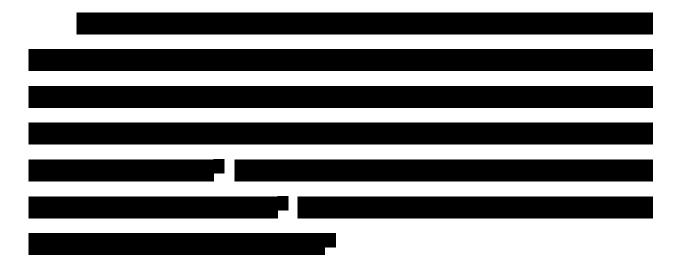
³⁸ See, e.g., Reitman Rep. 13 ("Further, among the named Defendants, the type of involvement each Defendant has or has had with PFAS is not the same because the Defendants sit in different positions within the supply network, depending on the type of PFAS and time frame. They have manufactured/used different PFAS at different times and in different ways, in different volumes, and for different durations.").

³⁹ Dep. 69:15–73:1.

⁴⁰ See Beck Rep. 35.

⁴¹ Alexander Rep. 8–9, 15–16 (noting, also, a "large volume of epidemiological studies" regarding PFAS "has been conducted on worldwide study populations with background, above background, and high levels of PFAS" and "do *not* support a causal relationship between exposure to any PFAS and human disease or adverse health conditions") *and* 25–30; Beck Rep. 16 ("[I]t is my opinion that the overall epidemiological, toxicological, and mode-of-action evidence does not demonstrate that humans have been harmed from PFAS exposure, either in occupational or community studies.").

⁴² See, e.g., Ex. 3, Expert Report of Dr. Jessica Herzstein ("Herzstein Rep.") at 21, 25 ("For asymptomatic individuals exposed to PFAS, insufficient evidence exists at this time to support



D. Without Offering Experts, Hardwick Wants a Court-Ordered Science Panel of Experts to Study Every Kind of PFAS.

If you ask Hardwick, as Defendants did at his deposition, he wants to "learn [what] personal

So what does Hardwick want from this lawsuit? It depends on whom you ask.

He sees this being accomplished by having the Court assemble a group of experts

But he does not want the science panel's findings to bind him or anyone else in the class; he wants those findings to be advisory only—at least as to him and his fellow 330 million would-be class members. *Id.* at 135:20–137:4. To take, as an example, type II diabetes, found by the *Leach* Settlement Science Panel to be unrelated to PFOA exposure, Hardwick testified as follows:

Q. If the science panel determined that there was no link, no probable link, no epidemiological link between PFAS exposure and type II diabetes, would you be comfortable if that prevented firefighters or others with diabetes from later bringing suits against PFAS manufacturers?

deviations from established standards of medical care" and "there is no established PFAS blood level at which a health risk is expected, nor is there a level that predicts health problems.").

⁴³ 44 45

A. No, I would not be comfortable with that.

Dep. 136:20–137:3 (objection deleted). Hardwick's answers to this inquiry were uniform regardless of disease; he would be comfortable supporting a remedy only in which the science panel's findings were informational and precatory. And that is all Hardwick himself wants: He does not seek medical monitoring for PFAS-related risks, only "a group to determine

He seeks nothing else. *Id.* at 134:2–11.

If you ask counsel for the putative class, on the other hand, the putative class seeks more. The motion filed by counsel seeks a binding "science panel" and "testing/medical monitoring" for Hardwick. Mot. 1. But not just for Hardwick. Class counsel also wants all of this relief for a class of 330 million people, to be certified under Federal Rule of Civil Procedure 23(b)(2), and comprising "any individual residing within the United States at the time of class certification for one year or more since 1977 with 0.05 parts per trillion (ppt) or more of PFOA and at least 0.05 ppt or more of any other PFAS in their blood serum." Mot. 1.

After certification, class counsel wants the science panel to study

to determine whether any kind of PFAS might cause any kind of disease or medical condition.

Neither Hardwick nor his counsel offers any experts or other literature or authority showing that any of this would be possible. The one science panel Hardwick frequently cites—the *Leach* Settlement Science Panel—is a different thing entirely. That was a contractually agreed-upon settlement—with built-in protections and with the scope of the limited assessment negotiated and

agreed upon by the parties ⁴⁶—not a class-certification decision entered over a defendant's objection. By negotiated agreement of the parties, the *Leach* Settlement Science Panel conducted a limited assessment according to a scope bilaterally agreed upon by class counsel and a single defendant. This was an assessment (rather than a nationwide study) of one PFAS compound (PFOA, rather than 5,000 compounds), focused on a limited population, including some persons exposed at significantly higher levels than in other communities, to determine "probable links" under the lower standard of the parties' contract (rather than the more demanding general-causation standard of toxic-tort law). Even that negotiated compromise for one specific chemical focused on people living near one industrial facility illustrates the monumental task facing any attempt to conduct a comprehensive, scientifically-sufficient nationwide study of all PFAS at all levels of exposure, all ordered by the Court.⁴⁷

Nor would this be necessary. This Court is not "the only option" to address PFAS, as Plaintiff suggests. Mem. 30. Other groups are currently studying, regulating, and legislating

⁴⁶ Some of the protections included: The *Leach* settlement was negotiated and approved in order to comprehensively resolve all the claims of the class, after notice and full opt-out rights, including personal-injury, medical-monitoring, and water-treatment claims. The settlement reached did not split the claims for class members with personal-injury claims and those with no injury who sought medical monitoring, and therefore embodied no irreconcilable conflicts. Under the *Leach* settlement agreement, moreover, the personal-injury claims were stayed and the statute of limitations was tolled until the panel made its determinations.

⁴⁷ See Alexander Rep. 7–8.

PFAS. 48 Indeed, Plaintiff's counsel has proposed that regulators conduct a national PFAS study. 49

And yet Hardwick wants this Court to interrupt those processes and mandate nationwide conclusions—with no scientific support for class certification or his class definition. Further, Plaintiff's motion contains no explanation on why the mixtures of PFAS (PFOA plus any other type of PFAS) were picked and no evidence to support that selection. And Plaintiff would not even answer Defendants' interrogatories asking for an explanation of such fundamental things as the basis (scientific or otherwise) for the proposed class definition; how Hardwick plans to test 330 million people using a testing level not currently available; how the proposed science panel would operate (or even at what stage of the case it would kick in); whether the panel's findings would be binding on the class; whether Hardwick was expressly seeking medical-monitoring relief; or Hardwick's plan for trying this mandatory class action.⁵⁰

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⁴⁸ See generally Beck Rep.; Alexander Rep. 15–16; Reitman Rep. 4–6; Ex. 5, Expert Report of Dr. Dallas Wait ("Wait Rep.") at 4; see, e.g., EPA, EPA PFAS Action Plan: Program Update (Feb. https://www.epa.gov/sites/production/files/2020-01/documents/ 2020), pfas action plan feb2020.pdf; Ohio EPA & Ohio Dep't of Health, Ohio Per- and Polyfluoroalkyl Substances (PFAS) Action Plan for Drinking Water (Dec. 2019), https://epa.ohio.gov/Portals/28/ documents/pfas/PFASActionPlan.pdf; California Water Boards, Notification Level Issuance-(Aug. 22. https://www.waterboards.ca.gov/drinking water/programs/documents/pfos nl issuance%20.pdf; California Water Boards, Notification Level Issuance – PFOA, at 1 (Aug. 22, 2019), available at https://www.waterboards.ca.gov/drinking water/programs/documents/pfoa nl issuance%20.pdf; ITRC, PFAS Water and Soil Values Table (Sept. 2020), available at http://pfasdev.itrcweb.org/wp-content/uploads/2020/10/ITRCPFASWaterandSoilValuesTables SEP 2020-FINAL.xlsx; see also, e.g., PFAS Research, National Institute of Environmental Health Sciences, available at https://www.niehs.nih.gov/research/programs/pfas/index.cfm; EPA, Research on Perand Polyfluoroalkyl Substances (PFAS), available at https://www.epa.gov/chemicalresearch/research-and-polyfluoroalkyl-substances-pfas#1.

⁴⁹ See Ex. 10, 2017 Bilott Letter, at 2 (stating that "[A]TSDR has the clear power and authority to mandate a national study of PFAS health impacts and associated testing. . . .").

⁵⁰ See, e.g., Ex. 11 (Plaintiff's Responses and Objections to Solvay Specialty Polymers USA, LLC's Second Set of Interrogatories, "Pl.'s Resp. to Solvay"); Ex. 12 (Plaintiff's Responses and Objections to Daikin America, Inc.'s Second Set of Interrogatories, "Pl.'s Resp. to DAI").

Hardwick did not fill in those details, but the experts and other record authority show that nothing Hardwick wants is possible.⁵¹ And that starts with certification of his class.

ARGUMENT

Class certification is the exception, not the rule. *See Wal-Mart Stores, Inc. v. Dukes*, 564 U.S. 338, 348 (2011). The plaintiff bears the burden of showing that the exception applies. *In re Am. Med. Sys., Inc.*, 75 F.3d 1069, 1086 (6th Cir. 1996). To meet this burden, the plaintiff cannot rest on his allegations but must provide evidence meeting Rule 23's requirements: "Rule 23," after all, "does not set forth a mere pleading standard." *Dukes*, 564 U.S. at 350. After the plaintiff produces evidence, the Court must perform a "rigorous analysis" of the evidence to determine whether the plaintiff has met his burden. *Id.* at 350–51.

All of this is so even when certification "touch[es] aspects of the merits." *Id.* at 351. Hardwick's contrary view—that courts are "not permitted to inquire into a case's merits at the class certification stage," Mem. 35 (citing *Eisen v. Carlisle & Jacquelin*, 417 U.S. 156, 177–78 (1974))—has long since been overruled. *Dukes*, 564 U.S. at 351 n.6 (abrogating the relevant part of *Eisen*). Now, courts "[f]requently" analyze "the merits of the plaintiff's underlying claim" in determining whether the plaintiff has satisfied Rule 23's requirements. *Dukes*, 564 U.S. at 351.

Performing the required rigorous analysis here leads only to one conclusion: Hardwick has failed to meet his burden—many times over.

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⁵¹ See Table and Summary of Expert Reports, supra, pp. vi–vii. As to Hardwick's refusal to answer an interrogatory directed at a trial plan: Hardwick's counsel has referred to this Court's January 17, 2017 decision in Palombaro, et al. v. Emery Federal Credit Union, Case No. 15-cv-792, in prior discussions with Defendants for the proposition that there is no express requirement under Rule 23 that a plaintiff submit a "formal trial plan" for class certification. But this Court's Palombaro decision went on to state that "this ruling does not relieve plaintiffs of their burden of showing in their motion for class certification the manageability of the proposed class . . ., whether by submission of a trial plan or some other means." Id. at p. 18 (emphasis added).

I. HARDWICK FAILS TO MEET RULE 23(B)(2)'S COHESIVENESS REQUIREMENT OR EVEN RULE 23(A)'S LESS STRINGENT COMMONALITY REQUIREMENT.

Hardwick seeks certification of his proposed nationwide class under Rule 23(b)(2). That Rule allows class treatment only if Defendants have "acted or refused to act on grounds that apply generally to the class, so that final injunctive relief or corresponding declaratory relief is appropriate respecting the class as a whole." Fed. R. Civ. P. 23(b)(2). As Hardwick purports to recognize, "[t]he key to the (b)(2) class is 'the indivisible nature of the injunctive or declaratory remedy warranted." *Dukes*, 564 U.S. at 360. The conduct must be "such that it can be enjoined or declared unlawful only as to all of the class members or as to none of them" through a "single injunction or declaratory judgment." *Id.* That means not only that the proposed class representative needs to seek relief common to the class, but also that the proposed class representative must be able to prove his claims with evidence common to each class member.

As a shorthand for this requirement, and consistent with the "indivisible nature" of Rule 23(b)(2) relief, courts require a proposed (b)(2) class to be "cohesive." *Romberio v. UnumProvident Corp.*, 385 F. App'x 423, 433 (6th Cir. 2009); *see also Harris v. Purdue Pharma, L.P.*, 218 F.R.D. 590, 597 (S.D. Ohio 2003); *Ebert v. Gen. Mills, Inc.*, 823 F.3d 472, 480 (8th Cir. 2016). Members of a (b)(2) class must, therefore, have "homogenous interests." *Coleman v. GMAC*, 296 F.3d 443, 447 (6th Cir. 2002); *see also Romberio*, 385 F. App'x at 433–34. Individual issues arising from the "disparate factual circumstances of class members" will "prevent [a] class from being cohesive." *Ebert*, 823 F.3d at 481; *see also Gates v. Rohm & Haas Co.*, 655 F.3d 255, 264 (3d Cir. 2011).

All classes must be cohesive in a sense—they must satisfy Rule 23(a)'s commonality requirement, and (b)(3) classes must also satisfy the predominance requirement. But (b)(2) imposes a higher bar for cohesion still. "[T]he cohesiveness requirement of Rule 23(b)(2) is more

stringent than the predominance and superiority requirements for maintaining a class action under Rule 23(b)(3)." *Ebert*, 823 F.3d at 480. And so it must be: A (b)(2) class is mandatory, with no opportunity to opt out and no right to notice (Fed. R. Civ. P. 23(c)(2)), and it seeks relief that "must perforce affect the entire class at once." *Dukes*, 564 U.S. at 361–62. Only true cohesiveness—over and above commonality and even predominance, cohesiveness that eliminates concerns over both the loss of individual claims and the prospect of individual issues—can make a proposed class worthy of (b)(2) certification. *See Romberio*, 385 F. App'x at 433–34; *Coleman*, 296 F.3d 447–48; *Ebert*, 823 F.3d at 481; *Gates*, 655 F.3d at 264.

Hardwick does not come close to satisfying the cohesiveness requirement of Rule 23(b)(2)—a requirement he barely mentions. He does not even satisfy Rule 23(a)'s less stringent commonality requirement. Viewed through either lens, his proposed class cannot be certified.

A. The Proposed Class Lacks The Required Cohesion for a (b)(2) Class.

No surprise in a proposed nationwide class of virtually all Americans against a variety of Defendants from around the world, this litigation is rife with individualized questions that inevitably will have individualized answers, making certification of any class—and especially a non-opt-out class that must satisfy the rigorous cohesiveness standard—impossible. There are stark differences in (1) the state law applicable to class claims, (2) the facts relevant to the claims of different class members, and (3) the class-member-specific facts relevant to defenses and other key issues. ⁵²

⁵² Because the Rules Enabling Act forbids interpreting Rule 23 to "abridge, enlarge or modify any substantive right," the Supreme Court has admonished that "a class cannot be certified on the premise that [a defendant] will not be entitled to litigate its statutory defenses to individual claims." *Dukes*, 564 U.S. at 367 (quoting 28 U.S.C. § 2072(b)); *see also Ortiz*, 527 U.S. at 845 ("[N]o reading of [Rule 23] can ignore the Act's mandate that rules of procedure shall not abridge, enlarge or modify any substantive right.") (quotation marks omitted). The same principle applies to a defendant's right to bring a "challenge to a plaintiff's ability to prove an element of liability." *In re Asacol Antitrust Litig.*, 907 F.3d 42, 53 (1st Cir. 2018).

1. State-law variation: The nationwide reach of the proposed class destroys any possible cohesiveness.

The laws of fifty states (and several territories, and perhaps even foreign countries⁵³) would govern the claims, defenses, requests for relief, and rights to allocate fault in this suit. Hardwick asserts state common-law claims. Am. Compl. ¶¶ 98–129. Under Ohio choice-of-law rules which apply in diversity suits brought in Ohio federal courts (Klaxon Co. v. Stentor Elec. Mfg. Co., 313 U.S. 487, 496 (1941))—there is a presumption that the law of the place of the injury controls unless another jurisdiction has a more significant relationship to the lawsuit. Morgan v. Biro Mfg. Co., 474 N.E.2d 286, 289 (Ohio 1984).⁵⁴ For a class of hundreds of millions of people who reside all over the United States (and potentially the world) and were exposed to different PFAS from different sources attributable to different Defendants (and untold non-parties) in different places, the choice-of-law inquiries (to wildly understate) would point to different states' laws. 55 Unavoidably, the class would face application of all fifty states' laws. See Pilgrim v. Universal Health Card, LLC, 660 F.3d 943, 946–49 (6th Cir. 2011) (rejecting nationwide class because Ohio choice-of-law principles required application of the law of the place of injury).

And the laws of the fifty states differ tremendously. Different class members, even otherwise similarly situated, would see different results on their individual claims. Different states

⁵³ The class definition could sweep in the law of foreign countries. It requires only one year of residency in the United States since 1977. It contains no requirement that putative class members live in the United States now, or that they have been exposed to any kind of PFAS or injured while living in the United States.

⁵⁴ To determine which jurisdiction has the most significant relationship, a court looks to various factors, including (1) "the place of the injury;" (2) "the place where the conduct causing the injury occurred;" (3) "the domicile, residence, nationality, place of incorporation, and place of business of the parties;" and (4) "the place where the relationship between the parties, if any, is located." Morgan, 474 N.E.2d at 289.

⁵⁵ Indeed, Hardwick's own history illustrates the complex assessments that would need to be made. He worked as a firefighter for the bulk of his career in Kentucky but also for many years in Ohio, implicating potential need for analysis under Kentucky and Ohio law, and potential choice-of-law problems.

have materially different legal standards for the claims, defenses, and relief raised here. Tables attached to this brief catalog just a sampling of the many apparent differences in relevant state law (see Defs.' App'x A–J), but a few examples—particularly differences concerning medical monitoring and some key claims and defenses—illustrate the point:

Medical Monitoring. State law on medical monitoring varies enormously. Some States would not allow medical monitoring for someone like Hardwick, who (for one thing) admittedly has no present illness or disease. Dep. 153:10–154:3; Ex. 7 (Pl's Resps. to Arkema) at 8–9; see, e.g., Henry v. Dow Chem. Co., 701 N.W.2d 684, 691 (Mich. 2005); Wood v. Wyeth-Ayerst Lab., 82 S.W.3d 849, 856–59 (Ky. 2002). Other states require an increased (or significantly increased) risk of disease or illness. See, e.g., Petito v. A.H. Robins Co., Inc., 750 So. 2d 103, 106–07 (Fla. Ct. App. 1999); Hansen v. Mountain Fuel Supply Co., 858 P.2d 970, 979 (Utah 1993). States also differ in the type and level of exposure required. See, e.g., Redland Soccer Club Inc. v. Dep't of the Army, 696 A.2d 137, 146 (Pa. 1997) (exposure to greater than normal background levels); Bower v. Westinghouse Elec. Corp., 522 S.E.2d 424, 433 (W. Va. 1999) (significant exposure). And those differences are only the tip of the iceberg. See Defs.' App'x A.

Hardwick's circumstances confirm the importance of these differences in state medical-monitoring law. He would have absolutely no claim in a number of states, even ones that might allow claims without present illness or disease.

Even if all class members presented the same circumstances—and, as explained below, they do

not—a class member's ability to prove an entitlement to medical monitoring relief would depend on (among other things) which state's law governed. That is the antithesis of class cohesion.

Differences in state medical-monitoring law have led one court after another, listed in the footnote below, to reject nationwide medical-monitoring classes.⁵⁶ As one court observed, "the necessity of applying 'the laws of each of the fifty states to the claims of members of the putative class" is an "insurmountable obstacle to class treatment of the claim for medical monitoring." *Zehel-Miller*, 223 F.R.D. at 663. The same is true here.

Claims and Defenses. But it is not just medical monitoring. Even the core of Hardwick's claims and Defendants' defenses exhibit similar variations.

Consider the proposed class negligence claim. States differ in the basis and scope of the duty of care, the breadth of any duty to warn, the role of foreseeability analysis, and the definition of proximate cause. See Defs.' App'x B. For instance, in some states, a manufacturer owes no duty of care to a person with whom it lacks a relationship, while a relationship might not be necessary in other states. See, e.g., In re Certified Question from Fourteenth Dist. Court of Appeals of Tex., 740 N.W.2d 206, 212 (Mich. 2007) (relationship required). These differences in state negligence law led the Sixth Circuit to reject certification of a nationwide class, reasoning that "a comparison of differing state pattern instructions on negligence and differing judicial formulations of the meaning of negligence and the subordinate concepts" indicates the "significance" of "how

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See, e.g., In re St. Jude Med., Inc., 425 F.3d 1116, 1122 (8th Cir. 2005); Zinser v. Accufix Research Inst., Inc., 253 F.3d 1180, 1188–89 (9th Cir. 2001); In re NHL Players' Concussion Injury Litig., 327 F.R.D. 245, 260–66 (D. Minn. 2018); In re Prempro, 230 F.R.D. 555, 569 (E.D. Ark. 2005); Bostick v. St. Jude Med., Inc., 2004 WL 3313614, at *11 (W.D. Tenn. Aug. 17, 2004); Zehel-Miller v. AstraZenaca Pharm., LP, 223 F.R.D. 659, 663–64 (M.D. Fla. 2004); In re Rezulin Prods. Liab. Litig., 210 F.R.D. 61, 74 (S.D.N.Y.2002); see also Georgine v. Amchem Prods., Inc., 83 F.3d 610, 627 (3d Cir. 1996) (citing differences in medical monitoring law in rejecting class certification), aff'd, 521 U.S. 591 (1997).

the law of negligence differs from jurisdiction to jurisdiction." *Am. Med. Sys.*, 75 F.3d at 1074, 1085. And the Sixth Circuit is by no means alone.⁵⁷ Again, the same analysis applies here.

Or, to take another example of the proposed class's claims, the battery and conspiracy-to-commit-battery claims are incapable of uniform treatment in a nationwide class (*see* Defs.' App'x C, D), which has led courts to reject nationwide classes for similar claims. *See*, *e.g.*, *Clay v. Am*. *Tobacco Co.*, 188 F.R.D. 483, 499 (S.D. Ill. 1999). For instance, battery in some states requires actual physical impairment (*see*, *e.g.*, *Rhodes v. E.I. du Pont de Nemours & Co.*, 636 F.3d 88, 95 (4th Cir. 2011) (West Virginia law)), while Plaintiff may claim it requires only offensive touching in others. The class is thus not cohesive.

The same holds true for other issues in this case. Defendants contend that Hardwick cannot prove causation—that any particular Defendant caused his or any class member's PFAS exposures. Hardwick attempts to side-step that problem by invoking "alternative liability and/or market-share liability." Those theories should not apply here under any State's law. But regardless, acceptance and application of those theories varies widely from State to State. Many States have already rejected alternative liability, market-share liability, or both—and those that have not done so apply different requirements (often strictly limiting the theories to particular claims (such as DES cases)). See Defs.' App'x F. Rules for allocating fault among defendants (and non-parties)—joint, several, and other regimes—also differ widely among states. See Georgine, 83 F.3d at 627.

Affirmative defenses, too, would vary by state. Some states have statutes of repose, while others do not. *See* Defs.' App'x B–D. And different states have different statutes of limitations—

⁵⁷ See also, e.g., In re Rhone-Poulenc Rorer, Inc., 51 F.3d 1293, 1300–01 (7th Cir. 1995) (rejecting nationwide class because "[t]he voices of the quasi-sovereigns that are the states of the United States sing negligence with a different pitch"); *Zinser*, 253 F.3d at 1188–89; *Prempro*, 230 F.R.D. at 564; *Harding v. Tambrands Inc.*, 165 F.R.D. 623, 629 (D. Kan. 1996).

ranging in the case of limitations periods for battery and negligence from one to six years (*see* Defs.' App'x B, C)—which is potentially outcome-determinative given the press, government, and academic reports on PFAS in the years leading up to the filing of this suit.⁵⁸ Bulk-supplier and sophisticated-user defenses—which could apply where a class member's exposure came from non-party products containing PFAS supplied by a Defendant—likewise vary by state. *See* Defs.' App'x I, J. States also take different approaches to contributory negligence, comparative negligence, and assumption of risk (*see* Defs.' App'x G, H), which could apply to class members who misused PFAS products or exposed themselves to PFAS after seeing reports of its alleged risks. And, in some states, the proposed class claims would be subject to the state's product liability act, which could either displace the common law claims entirely or add elements and defenses to the claims. *See*, *e.g.*, MICH. COMP. LAWS 600.2946 et seq. (elements and defenses); CONN. GEN. STAT. § 52-572n(a) (displacement); Defs.' App'x F. State law variations in these defenses have led courts to reject nationwide classes. *See*, *e.g.*, *Georgine*, 83 F.3d at 627; *Zehel-Miller*, 223 F.R.D. at 664. This Court should too.

In addition to *knowing* that state law varies on all of these issues, there is also the problem of *not* knowing what the highest courts in some states would do on many of these key issues, including the availability of medical monitoring for asymptomatic plaintiffs. *See* Defs.' App'x A–F, I, J. As other courts have recognized, "that would force this Court into the undesirable position of attempting to predict how [each state's] courts of last resort would resolve [those] issue[s]."

⁵⁸ See, e.g., https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/fact-sheet-20102015-pfoa-stewardship-program; https://www.epa.gov/sites/production/files/2015-09/documents/pfoa-pfos-provisional.pdf; https://www.epa.gov/sites/production/files/2016-06/documents/drinkingwaterhealthadvisories_pfoa_pfos_updated_5.31.16.pdf.

Zehel-Miller, 223 F.R.D. at 663 (internal citations omitted). "There simply is no justification for embarking on so complex a path." *Id.* (internal citations omitted).

* * *

Any of these differences in state law—on medical monitoring, negligence, battery, conspiracy, causation, alternative liability, market-share liability, and on and on—would alone be enough to deny certification. Together they present an overwhelming case against certification of the only class Hardwick seeks to certify. Whenever faced with even *some* of these differences in state law, the Sixth Circuit has refused to approve of a nationwide class, in accord with rulings from many other courts. *See, e.g., Pilgrim*, 660 F.3d at 948–49; *Am. Med. Sys.*, 75 F.3d at 1085; *see also, e.g., Colley v. Procter & Gamble Co.*, 2016 WL 5791658, at *6 (S.D. Ohio Oct. 4, 2016). As the Sixth Circuit has held, "[i]f more than a few of the laws of the fifty states differ, the district judge would face an impossible task of instructing a jury on the relevant law," and "class certification would not be the appropriate course of action." *Am. Med. Sys.*, 75 F.3d at 1085. It is inappropriate here too—especially under the rigorous cohesion requirement of Rule 23(b)(2).

2. Class-member variation: Class members differ in fundamental ways, making it impossible to rule on the claims as to all of them together.

Beyond the variations in state law, there is huge variation in class member experiences with the enormous variety of PFAS and PFAS-containing products—to which Defendants and numerous non-parties have very different connections that varied over time and by location. This, too, makes the proposed class anything but cohesive. In cases alleging far less variation in exposure to purportedly harmful substances, courts have regularly rejected class certification on cohesion and similar grounds. Those cases include decisions from the Sixth Circuit, federal district courts in Ohio, and the Ohio Supreme Court. *Ball v. Union Carbide Corp.*, 385 F.3d 713, 727–28 (6th Cir. 2004) (radioactive emissions, no commonality or typicality); *In re Welding Fume Prods*.

Liab. Litig., 245 F.R.D. 279, 309–11 (N.D. Ohio 2007) (beryllium, no typicality); Harris, 218 F.R.D. at 597 (medication, no cohesion); Wilson v. Brush Wellman, Inc., 817 N.E.2d 59, 65-66 (Ohio 2004) (beryllium, no cohesion). They also include at least three cases based on PFAS exposures. Rowe v. E.I. du Pont de Nemours & Co., 2008 WL 5412912, at *9-22 (D.N.J. 2008) (PFOA, no cohesion); Rhodes v. E.I. du Pont de Nemours & Co., 253 F.R.D. 365, 374–80 (S.D. W. Va. 2008) (PFOA, no cohesion); *Palmer v. 3M Co.*, No. C2-04-6309, 2007 WL 1879844, at *18–20, *42–47 (Minn. Dist. Ct. Jun. 19, 2007) (several PFAS, no typicality or predominance); In re Teflon Prods. Liab. Litig., 254 F.R.D. 354 (S.D. Iowa 2008) (PFOA in consumer claims context, no cohesiveness). This case should join that good company.

The grounds for denying class certification here are particularly strong because the differences among class members flow in part from the lack of any common, class-wide conduct by the Defendants. For a class to be certified, Rule 23(b)(2) requires that the defendants have "acted or refused to act on grounds that apply generally to the class," Fed. R. Civ. P. 23(b)(2)—so that their "conduct . . . can be enjoined or declared unlawful" in one fell swoop, as to all of them or none of them, Dukes, 564 U.S. at 360-61. Hardwick has not set forth a course of conduct by Defendants that applies "generally to the class." Fed. R. Civ. P. 23(b)(2). Much to the contrary, Hardwick's "and/or" list of Defendants' actions shows that there is no conduct that can be generalized to the hodgepodge of Defendants that Hardwick has thrown together in this case. Any production, sale, or use over a specific time period of specific types of PFAS in specific locations varies from Defendant to Defendant—confirming that (b)(2) certification would be improper.⁵⁹

⁵⁹ See, e.g., Creech v. Emerson Elec. Co., 3:15-cv-14, 2019 WL 1723716, at *13 (S.D. Ohio Apr. 18, 2019) (denying Rule 23(b)(2) certification because "Plaintiff has failed to prove that Defendants acted or refused to act on grounds that apply generally to the entire class"); Shook v. Bd. Of Cnty. Comm'rs, 543 F.3d 597, 606 n.5 (10th Cir. 2008) ("[t]he broader class . . . raises concerns about whether defendants acted on 'grounds that apply generally to the class,'" because

Differing "injuries" of class members. Whether PFAS exposures harmed each putative class member is a central issue in this litigation—and a source of cohesion-destroying variation. Hardwick characterizes "[t]he harm in this case" as "an increased risk of disease because of contamination of their blood and bodies." Mem. 32. But—even if, contrary to the law in many states, such "harm" could be a cognizable injury—whether a class member has incurred "an increased risk of disease" depends on the class-member-specific answers to a host of individual questions.

The Court (and any jury) would need to know which of the thousands of PFAS the class member was exposed. By definition, different class members have been exposed to different PFAS. Mem. 4; *see also* Beck Rep. 4–5, 16–27; Reitman Rep. 9–11. And different PFAS have different attributes that impact the assessment of whether they might be harmful and at what level of exposure. Beck Rep. 14–15, 37–45; Reitman Rep. 4–8. For instance, some PFAS have a half-life measured in hours. Beck Rep. 41–45 & Table 7.3.

Hardwick would need to establish for each class member the amount, frequency, and duration of any particular PFAS exposure, as well as current PFAS blood levels. A fundamental principle of toxicology is that the dose makes the poison. *Id.* at 6–7. In high enough doses, even essential substances like water and salt can be harmful. And in low enough doses, even recognized toxins like manganese are innocuous, and some are necessary for life. The same principle applies to PFAS; any potential risk of health effects depends in part on the dose. *Id.* at 6–7, 16, 30–37;

certain class members "are not subject to defendants' policies . . . in any meaningful way"); *Civil Rights Educ. & Enforcement Ctr. v. Hospitality Props. Trust*, 317 F.R.D. 91, 105 (N.D. Cal. 2016) (denying Rule 23(b)(2) certification where "there can be no 'generally applicable' relief in this case" across multiple locations).

Herzstein Rep. 20–21; Alexander Rep. 5–6. And doses vary enormously among exposed individuals. Beck Rep. 16–36; *accord* Mem. 4.

Individual demographic and health factors also affect any assessment of a class member's risk of disease. Even if a factfinder somehow concluded that some real-world dose of some PFAS could have health effects, ⁶⁰ the age, gender, weight, genetic predispositions, medical history, lifestyle, and existing health issues would have a big impact in determining whether any particular class member might face increased health risks. Beck Rep. 30–34, 40–44, 46; Herzstein Rep. 9–11; Alexander Rep. 6–7. In short, the many variations in class member PFAS exposures and health circumstances mean that each putative class member would have a materially different case to prove on the harm/increased-risk question. Whether the types and amounts of PFAS in the blood of one class member with a given health background create "an increased risk of disease" says nothing about the ability of a different class member, with a different medical background and different types and amounts of PFAS in his or her blood, to demonstrate "an increased risk of disease."

Case after toxic exposure case holds that class member variations like these in substances, doses, and backgrounds prevent class certification. That's one reason the Supreme Court rejected class certification in *Amchem Prod., Inc. v. Windsor*, 521 U.S. 591, 624 (1997) (no common-issue predominance where "[c]lass members were exposed to different asbestos-containing products, for different amounts of time, in different ways, and over different periods" and had different personal histories). It led the Sixth Circuit to do the same in *Ball*. 385 F.3d at 727–28 (no commonality or typicality where "[e]ach individual's claim was... proportional to his or her

⁶⁰ Defendants deny that a real-world dose of some PFAS can have health effects. *See* Beck Rep. 1 n.1, 16, 37; Alexander Rep. 8–14 & App'x C.

exposure to toxic emissions or waste"). And it is why *Rhodes* and *Rowe*—cases which addressed a single substance and a single alleged source defendant—denied motions to certify (b)(2) classes seeking to litigate PFOA exposure claims. *Rhodes*, 253 F.R.D. at 376–79 (no cohesion where "each class member's 'risk of disease will vary based upon: (a) variations in [C-8] exposure and dose ... and (b) variations in an individual's background risk of disease"); *Rowe*, 2008 WL 5412912, at *17–20 (no cohesion where "each individual's risk of disease will vary depending on his/her actual PFOA exposure as well as his/her background risk of disease"). Other cases reach the same result. *See*, *e.g.*, *Palmer*, slip op. at 43–44 (refusing to presume classwide subcellular injury from PFAS exposure due to need for "individualized inquiry" into "lifestyle, level of exposure, and susceptibility to illness," as well as "medical records and histories of each plaintiff").⁶¹ The many class-member-specific variations here dictate the same outcome.

Different kinds of medical monitoring. Further cohesion-destroying variation arises from the request for the still unspecified medical-monitoring relief that Hardwick's complaint and motion apparently seek. See Mem. 2; ECF No. 128 at 17–21 ("MTD Op."). Although the requirements for (and availability of) such relief vary by jurisdiction, a plaintiff usually must show (among other things) some kind of meaningful exposure to a harmful substance, some kind of actual injury or materially increased risk of disease, and some kind of need for or benefit from medical monitoring that outweighs the risks of such monitoring. Defs.' App'x A. Each of those requirements turns on the answers to a series of class-member-specific questions. Which PFAS was a class member exposed to? In what quantity and for what duration and frequency? What are

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⁶¹ See also, e.g., Gates, 655 F.3d at 266–68; Modern Holdings, LLC v. Corning, Inc., 2018 WL 1546355, at *14–16 (E.D. Ky. 2018); Coleman v. Union Carbide Corp., 2013 WL 5461855, at *41–42 (S.D. W. Va. 2013); Welding Fume, 245 F.R.D. at 309–11; Perez v. Metabolife Int'l, Inc., 218 F.R.D. 262, 271–75 (S.D. Fla. 2003).

the class member's PFAS blood levels? Was the exposure "significant" for the class member? Did the exposure injure the class member? Did the exposure increase the class member's risk of disease? By how much? What medical care and monitoring is the class member already receiving? What, if any, additional monitoring is necessary? What risks would such monitoring create for the class member? The answers to these questions necessarily will differ widely.

Hardwick proposes an intentionally generic class, making no differentiation based on the type of PFAS to which class members were exposed, the degree of their individual exposures, or (as noted) the operative substantive law applicable to the individual class members' claims. Nor does Hardwick even attempt to demonstrate that the claims for medical monitoring of the least exposed and more heavily exposed proposed class members are identical or in any way cohesive. Similarly, Hardwick assumes that the claims of those exposed to different PFAS should be lumped together regardless of whether testing has demonstrated any health risks. Hardwick simply ignores all these issues. As Defendants' experts describe, however, the answers to these questions would be far from the same for every class member. Even if one assumed (contrary to the weight of scientific evidence) that some actual human dose of some PFAS could significantly increase certain health risks, class members have different exposures to different PFAS that would affect them differently (if at all) and would call for different medical-care responses (if any) based on their distinct demographic, genetic, and health circumstances. Herzstein Rep. 9–24; Beck Rep. 46.

The breadth of the proposed class adds to the lack of cohesion on the kind of medical monitoring needed in another way as well. The class definition appears to be intended to comprise substantially all of the U.S. population. *See* Am. Compl. ¶ 55; Mem. 38 n.10. But a need for medical monitoring is defined by heightened risk *compared to the general population*. Herzstein Rep. 3, 22, 31. And the general population is already monitored using standards suitable for

prevalence of diseases in the population. *Id.* at 3. But even if Hardwick limited any medical monitoring to subsets of the proposed class, it would simply exacerbate the lack of class cohesion.

When it comes to proposed medical-monitoring classes, therefore, "numerous courts across the country have denied certification" because the proposed classes "suffer from cohesion difficulties"—and that is even setting aside the differences in state law. *St. Jude*, 425 F.3d at 1122. The Sixth Circuit in *Ball* held that, "by seeking medical monitoring . . . , Plaintiffs have raised individual issues" that preclude class certification. 385 F.3d at 728. So too in *Rowe* and *Rhodes*, which rejected certification of a PFOA-exposure medical-monitoring class and found that "the elements of significant exposure, increased risk of disease, and necessity of medical monitoring pose numerous individualized issues" that "preclude[] a finding of cohesiveness" and "render[] certification under 23(b)(2) inappropriate." *Rowe*, 2008 WL 5412912, at *20; *Rhodes*, 253 F.R.D. at 380. And so too for many other courts.⁶² Variations among class members in exposures, health risks, and need for monitoring eliminate the cohesion required to certify a class.

Proving negligence. Whether any particular Defendant breached a duty to any particular class member "is inextricably intertwined with individual issues," given that different Defendants had different connections to different types of PFAS or PFAS-containing products at different time periods in different locations. Reitman Rep. 9–13; see, e.g., Harris, 218 F.R.D. at 597. Among these individualized questions: Which PFAS was the class member exposed to? Which Defendant's products, substances, or activities did that PFAS come from, if any? Which of the thousands of non-party manufacturers or sellers is the PFAS linked to, if any? When did the Defendant make or sell those products or engage in those activities, if ever? What were the PFAS-

⁶² See e.g., Gates, 655 F.3d at 265–68; St. Jude, 425 F.3d at 1122; Coleman, 2013 WL 5461855, at *40–42; In re Fosamax Prods. Liab. Litig., 248 F.R.D. 389, 399–401 (S.D.N.Y. 2008); Welding Fume, 245 F.R.D. at 309–11; Perez, 218 F.R.D. at 271–75.

related risks of that product or of those activities, if any? What did the Defendant or applicable non-parties know about any such risks at the time, if anything? What warnings, if any, accompanied those products or activities? How was the class member exposed?

Answers to any of these questions, which vary enormously among class members and Defendants (Beck Rep. 4–5, 16–27; Reitman Rep. 4–14), let alone the many relevant non-party manufacturers and sellers, can have a dispositive impact on the knowledge, foreseeability, and reasonableness issues that inform the necessarily class-member- and Defendant-specific negligence determinations. *See*, *e.g.*, 1 CV Ohio Jury Instrs. 401.01, 401.07. Courts thus routinely reject certification when, as here, putative class members would have to prove negligence across different products made or sold by different defendants over a long time period. *See Welding Fume*, 245 F.R.D. at 309–10; *Palmer*, slip op. at 42–43.⁶³

Hardwick's lengthy but superficial account of what Defendants supposedly knew at certain times about the persistence, bioaccumulation, and purported health effects of certain PFAS and yet allegedly kept from regulators and the public does not call for a different result. As an initial matter, Hardwick is wrong on the substance: Defendants and others disclosed ample information about PFAS (through, for example, product labeling, published studies, regulatory disclosures, and other communications). But more important for present purposes is that even if there were any truth to Hardwick's assertions, those assertions only underscore the disparate nature of the proposed class. Hardwick's own assertions show that different Defendants acquired different knowledge about different PFAS at different times and took different actions in response to that

⁶³ See also, e.g., Am. Med. Sys., 75 F.3d at 1074, 1084–85; Barraza v. C.R. Bard Inc., 322 F.R.D. 369, 381, 390 (D. Ariz. 2017); Zehel-Miller, 223 F.R.D. at 664; Harris, 218 F.R.D. at 597; In re Baycol Prods. Litig., 218 F.R.D. 197, 208, 212 (D. Minn. 2003); Benner v. Becton Dickinson & Co., 214 F.R.D. 157, 165–67 (S.D.N.Y. 2003); Wilson, 817 N.E.2d at 66.

knowledge. A class member exposed to, say, PFOS used by one Defendant and numerous non-parties in the mid-1980s would face very different facts on knowledge (and many other issues) than another class member exposed to, say, PFBA used by a different Defendant or non-party in the mid-1990s, or than a third class member exposed to PFOA used by a third Defendant and other non-parties in the early-2000s. And on and on and on. *See Brown v. Worthington Steel, Inc.*, 211 F.R.D. 320, 326 (S.D. Ohio 2002) (Sargus, J.) (rejecting commonality for a single company whose policies changed over time).

Proving battery for each class member. Similar cohesion difficulties afflict Hardwick's battery claim. Whether any particular class member's exposure to PFAS constitutes a harmful or offensive touching (even setting aside the differences in state law) depends on the type of PFAS, the amount and nature of exposure, and the health circumstances of the class member. See Beck Rep. 10–11, 20–28; Herzstein Rep. 9–10. For some class members, some exposures to some PFAS would be neither harmful nor offensive (either objectively or subjectively). See, e.g., Rhodes, 636 F.3d at 95 (rejecting battery claim based on asymptomatic PFOA exposure). Likewise, a class member's ability to prove the intent required (in most states) for a battery claim would depend on individual inquiries into what PFAS he or she was exposed to, when he or she was exposed, and the nature and circumstances of the exposure (including how the PFAS got from a Defendant to the class member). See Palmer, slip op. at 45–46 (refusing to certify class for PFAS battery claim). Even then, the ability of one class member to prove intent or a harmful/offensive touching for one Defendant would have no bearing on another class member's ability to prove those things for another Defendant whose alleged actions led to exposure to a different type of PFAS in a different location through different means during a different time period. These claims are incapable of rising or falling as a class.

Proving causation for each class member. The same is true of causation, even assuming that the fifty states had a single causation standard. This is not a case where all class members were exposed to the same substance in the same way due to the actions of a single defendant. Much to the contrary, class members were exposed to anywhere between two to five thousand different kinds of substances (Mem. 4), made or used by different Defendants and potentially others (Reitman Rep. 9–13), and their exposures happened in one or more different ways, including: (a) drinking municipal or well water containing various PFAS; (b) working with certain PFAS or products containing PFAS; (c) using consumer products containing particular PFAS; (d) breathing PFAS air emissions; or (e) some as yet unknown means of exposure. Beck Rep. 16–27. What's more, their exposures happened at different times and in different places. *Id.* at 4–5, 10, 16–30. Different Defendants were involved in making, selling, using, or releasing different PFAS and PFAS-containing products. See Reitman Rep. 9–13. And many non-Defendants made, sold, used, or released PFAS and PFAS-containing products. See id. Some Defendants had no connection to certain PFAS and PFAS-containing products. And some Defendants had connections to certain PFAS and PFAS-containing products only for certain periods of time or only in certain locations.

As a result, putative class members would have different causation arguments based on different evidence. A New York resident exposed to certain PFAS made by a certain Defendant or non-party from drinking well water sourced near a manufacturing facility in 1980 has a very different case, to put it lightly, from a Texas resident exposed at work in a third party's fluoropolymer coating facility in 2015 to other PFAS made by a different Defendant or non-parties. And those two have different cases still from an Ohio (or Kentucky) firefighter who worked with AFFF, made with PFAS from a different Defendant (or non-party) still. Which, if any, entities are liable to the individual in New York is irrelevant to determining which, if any, entities are liable

to the Texas class member, not to mention the Ohio (or Kentucky) firefighter. Now substitute another state, another kind of PFAS made or used by a different Defendant or non-party still, different levels of PFAS, different products, and a different exposure path. The permutations are virtually endless.⁶⁴

Facing similar, but far less sprawling, proposed classes, courts in the Sixth Circuit and all around the nation have ruled that individual causation questions defeat the cohesion needed to certify a class. In *Ball*, for instance, the Sixth Circuit rejected class certification in a toxic emissions case because "there is no 'single course of conduct," and "there are multiple defendants with presumably differing liability levels." 385 F.3d at 728 (quoting Fed. R. Civ. P. 23(b)(2)). The Sixth Circuit reached the same result in *American Medical Systems*, reasoning that "there is no common cause of injury" because "the products are different, each plaintiff has a unique complaint, and each receives different information." 75 F.3d at 1084–85. And the *Welding Fume* court similarly denied class certification because "the great variety of products, manufacturers, warnings, employers, and workplaces involved" in exposure to manganese fumes mean that "there is ultimately no single course of conduct by all of the defendants." 245 F.R.D. at 310–11. Many other cases adopt the same reasoning.⁶⁵ There is no basis for this Court to chart a different course.

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Even in the states that recognize such theories, alternative or market-share liability cannot save the proposed class from these causation issues because this suit does not name all potential PFAS sources as defendants and because PFAS and PFAS-containing products are not fungible. *See, e.g., Goldman v. Johns-Manville Sales Corp.*, 514 N.E.2d 691, 696–701 (Ohio 1987) (refusing to apply either theory where all suppliers were not before the court and the products were not fungible).

See, e.g., Modern Holdings, 2018 WL 1546355, at *7–8, *13–16; Barraza, 322 F.R.D. at 389–90; Henke v. ARCO Midcon, LLC, 2014 WL 982777, at *14–16 (E.D. Mo. Mar. 12, 2014); Coleman, 2013 WL 5461855, at *41–42; Palmer, slip op. at 43–44; Reilly v. Gould, Inc., 965 F. Supp. 588, 602–04 (M.D. Pa. 1997); Kurczi v. Eli Lilly & Co., 160 F.R.D. 667, 673–75, 677 (N.D. Ohio 1995).

Given all of these differences, it makes sense that in cases not even approaching this level of individualized factors—including PFAS cases—courts routinely reject class certification on cohesion and similar grounds. *Ball*, 385 F.3d at 727–28; *Welding Fume*, 245 F.R.D. at 309–11; *Wilson*, 817 N.E2d at 65–66; *Rowe*, 2008 WL 5412912, at *9–22; *Rhodes*, 253 F.R.D. at 374–80; *Palmer*, slip op. at 18–20, 42–47. This massive case, with this much variation, deserves even less to be certified.

3. Other individualized issues preclude certification.

All of this is plenty to deny certification on cohesiveness grounds. But other important issues only add to the need for individual inquiries. Briefly:

- As explained, choice-of-law questions would require the court to determine the place of injury for each class member and assess all of the other factors relevant under Ohio law. *See, e.g., St. Jude*, 425 F.3d at 1120. The frequency with which people move and (like Hardwick) work across state lines makes individual determinations essential and weighs against certification. *See, e.g., Georgine*, 83 F.3d at 627.
- Defenses based on statutes of limitations and repose, including state-specific discovery rules, likewise call for class-member-specific analysis. As noted, information about the presence of PFAS in people's blood and associated potential health concerns have been in the public domain for a long time. And some class members—depending on their attention to government reports or news stories, their proximity to known sites of PFAS contamination, their participation in previous PFAS testing or PFAS litigation, and their development of any actual illness purportedly related to PFAS—would have had sufficient actual knowledge of their potential negligence or battery claims to trigger the statute of limitations in their state. But the analysis and answer would be different for different class members (even setting aside

differences in state law), creating another cohesion problem for the proposed class. *See Barnes* v. Am. Tobacco Co., 161 F.3d 127, 149 (3d Cir. 1998) ("determining whether each class member's claim is barred by the statute of limitations raises individual issues that prevent class certification"). ⁶⁶

- Defenses like contributory negligence, comparative negligence, and assumption of risk also raise necessarily individualized questions that undermine cohesion. Those defenses turn on how particular class members were exposed to PFAS, what they knew about PFAS at the time of exposure, and what they could have done to avoid exposure. The proposed class includes, for example, individuals (including Hardwick himself) who sold PFAS or PFAS-containing products to other class members. Many decisions recognize the individualized nature of these defenses as a barrier to cohesion.⁶⁷
- The federal-government-contractor defense—which protects manufacturers and sellers of products that conformed to reasonably precise specifications approved by the federal government (*Boyle v. United Techs. Corp.*, 487 U.S. 500 (1988))—likewise requires individual inquiries. The defense potentially applies to some PFAS-containing products (including certain AFFF) but not all. As a result, some, but not all, class members would face the defense by different combinations of Defendants, depending on which PFAS or PFAS-containing products they were exposed to.

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⁶⁶ See also, e.g., Georgine, 83 F.3d at 626–27; Prempro, 230 F.R.D. at 567; Wilson, 817 N.E.2d at 545; Henke, 2014 WL 982777, at *19–20; Modern Holdings, 2018 WL 1546355, at *16.

⁶⁷ See, e.g., Prempro, 230 F.R.D. at 567; Barnes, 161 F.3d at 146–49; Georgine, 83 F.3d at 626–27; Zehel-Miller, 223 F.R.D. at 664; Wilson, 817 N.E.2d at 545; Barraza, 322 F.R.D. at 379–81, 390; Perez, 218 F.R.D. at 271; Fosamax, 248 F.R.D. at 401–02.

The upshot is that the Court cannot "declare[]" Defendants' conduct "unlawful only as to all of the class members or as to none of them," as it must for a (b)(2) class. *Dukes*, 564 U.S. at 360. Hardwick's motion thus must be denied.

B. Hardwick's Commonality Arguments Do Not Change This Conclusion.

Hardwick makes only passing reference to cohesiveness, even though cohesiveness is a more stringent requirement not only than commonality but also than predominance. His motion says nothing about the enormous variations among putative class members or the many cases rejecting class certification based on similar variations. Hardwick instead lumps together all class members, all PFAS, and all Defendants (Mem. 49–50)—assuming away all of the thousands of non-party manufacturers and sellers—and focuses on commonality (*id.* at 38–40).

But not even that less rigorous standard is met here. Hardwick identifies a series of questions that he claims to be common ones for purposes of commonality. *Id.* at 39–40. He does not, however, back those *ipse dixit* statements with actual evidence that the liability and relief questions in this case have common classwide answers. And the record assembled by Defendants refutes even Hardwick's assertions of commonality, far more any possible assertion of cohesiveness.

1. Though Hardwick purports to identify "common legal and factual questions," Mem. 39–40, none of them are amenable to common, classwide *answers*. And as the Supreme Court has made clear, "[w]hat matters to class certification . . . is not the raising of common 'questions'— even in droves—but rather, the capacity of a class-wide proceeding to generate common answers apt to drive the resolution of the litigation. Dissimilarities within the proposed class are what have the potential to impede the generation of common answers." *Dukes*, 564 U.S. at 350; *see also id*. (commonality requires that "determination of [supposed common questions'] truth or falsity will resolve an issue that is central to the validity of each one of the claims in one stroke").

Here, as canvassed above, a determination of "[w]hether Defendants owed a duty to a Plaintiff and members of the class to refrain from acts and/or omissions reasonably likely to result in PFAS in the[ir] blood," and "[w]hether Defendants knew, anticipated, foresaw, and/or should have known, anticipated, and or/foreseen that [their actions] were unreasonably dangerous" or "likely to result in" PFAS accumulation in class members' bodies, Mem. 39–40 (questions a-c), turn on numerous individualized inquiries. Different Defendants engaged in different acts, with regard to different forms of PFAS, at different time periods, in different locations, subject to differing legal and regulatory standards. See, e.g., Reitman Rep. 9-10, 12-13. Whether one of them "owed a duty" to a given class member, or reasonably foresaw one class member's exposure to one form of PFAS in a certain location in a particular time period, says nothing about whether that same defendant (or another defendant) owed a duty or reasonably foresaw exposure to a different type of PFAS for a different class member through different means in a different location decades apart. Additionally, whether exposure to a particular PFAS was "unreasonably dangerous" to any class member, whether PFAS "is injurious, offensive, and/or otherwise harmful" to any particular class member, and "[w]hether a reasonable physician would order medical monitoring under the circumstances," Mem. 39-40 (questions b, e, h), turns on a multitude of individualized considerations pertaining to the type of PFAS, its quantity, the length of exposure, and the individual's medical background. See Section I.A, supra; Herzstein Rep. 2–3.

Even *more* dubious is the ability to answer on a classwide basis whether any given Defendant's "actions and/or omissions proximately caused PFAS to contaminate, persist in, and accumulate in the blood and/or bod[y] of" any individual class member, and whether Defendants' conduct caused "irreparable harm" to any individual. Mem. 39–40 (questions d, f). Answers to all of these questions turn on highly individualized inquiries regarding the causal connection

between, on the one hand, each Defendant's individualized actions regarding different types of PFAS in different locations and during different time periods and, on the other hand, the risk of illness posed to individuals with unique medical backgrounds who were exposed to those different types of PFAS in different quantities over different periods of time. As a result, whether any given Defendant's "conduct warrants injunctive and/or declaratory relief," Mem. 40 (question g), *i.e.*, whether any individual class member can prove a viable claim against any particular defendant, cannot possibly be answered on a classwide basis.

In short, the vast "[d]issimilarities within the proposed class . . . impede the generation of common answers" to any of the questions that Plaintiff poses. *Dukes*, 564 U.S. at 350. As a result, commonality is lacking. *See*, *e.g.*, *Ball*, 385 F.3d at 727–78 (affirming denial of certification of class seeking medical monitoring after exposure to toxic substances, because "[p]laintiffs have raised individualized issues"); *Am. Med. Sys.*, 75 F.3d at 1081 (reversing district court and finding commonality lacking, because "[p]laintiffs' claims will differ . . . depending upon the [product] model [received] and the year it was issued"); *Harris*, 218 F.R.D. at 596 (commonality was lacking because the purportedly "central factual issues" that plaintiff identified would be "highly individualized").

Nor does Hardwick meet the part of the commonality requirement that a plaintiff must "demonstrate that the class members 'have suffered the same injury." *Dukes*, 564 U.S. at 349–50; *accord Rikos v. Procter & Gamble Co.*, 799 F.3d 497, 505 (6th Cir. 2015) (plaintiff must show that he "can prove . . . that all members of the class have suffered the 'same injury'"). Here, for all of the reasons described in discussing cohesiveness, and given the undisputed expert analyses and Hardwick's own admissions, Hardwick plainly has not shown that he can prove that all class members have suffered the "same injury." *See, e.g., Dukes*, 564 U.S. at 356 (finding no

commonality where plaintiff had not shown that his "theory can be proved on a classwide basis"); *Hood v. Gilster-Mary Lee Corp.*, No. 3:14-cv-05012, 2016 WL 5852866, at *5 (W.D. Mo. Sept. 30, 2016) (denying certification of medical monitoring class, where "there may not be a common answer to whether class members 'have suffered the same injury," because "[u]nique medical histories and exposure levels would likely lead to variations in appropriate monitoring protocols").

2. None of the cases on which Hardwick relies supports a different result—not on commonality and certainly not on cohesion.

In a handful of cases, courts have certified class actions to litigate claims for certain PFAS exposure. Even assuming their correctness, though, those cases resemble this one even less than a rain drop resembles the Pacific Ocean. They all involved emissions of one or two PFAS from a single facility operated by a single defendant that allegedly affected a single community by creating localized exposures that went far beyond exposures elsewhere:

- Sullivan v. Saint-Gobain Performance Plastics Corp., 2019 WL 8272995 (D. Vt. Aug. 23, 2019), involved PFOA emissions from a fabric coating plant, a class of no more than 8,300 residents who had already undergone blood testing, and evidence explaining how the emissions got into the water of all class members.
- Hermens v. Textile Coated, Inc., Nos. 216-2017-CV-00524 et al. (N.H. Super. Ct. Jul. 30, 2017), involved PFOA and PFOS emissions from a facility manufacturing fluoropolymer films, laminates, and composites, a class consisting of individuals living in no more than 250 residences who ingested water with PFOA/PFOS concentrations above state standards, and no evidence of alternative PFOA/PFOS sources.
- Burdick v. Tonoga, Inc., 110 N.Y.S.3d 219 (Sup. Ct. 2018), aff'd, 112 N.Y.S.3d 342 (App. Div. 2019), involved PFOA emissions from another fabric coating plant, a class of about 400

residents with PFOA blood levels above background, no evidence of alternative sources, and reliance on the notion that medical-monitoring requirements in New York are less demanding than in other states.⁶⁸

The other cases invoked by Hardwick—some of which did not even involve class certification and none of which involved the stringent cohesion requirement—are even further afield.⁶⁹

In stark contrast to any of those cases, here Hardwick seeks certification of a nationwide class consisting of hundreds of millions of putative class members allegedly exposed to different combinations of thousands of different types of substances somehow attributable to different Defendants and third parties, in different locations through different means over a forty-plus year

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Hardwick also references, but does not cite, *Leach v. E.I. du Pont de Nemours & Co.*, 2002 WL 1270121, at *13 (W. Va. Cir. Ct. Apr. 10, 2002), which involved PFOA emissions from a single facility and the application of loose class certification standards. Later PFAS class certification decisions readily distinguished *Leach*. *See*, *e.g.*, *Rowe*, 2008 WL 5412912, at *9; *Palmer*, slip op. at 38; *Rhodes*, 259 F.R.D. at 374–81.

See Benoit v. Saint-Gobain Performance Plastics Corp., 959 F.3d 491 (2d Cir. 2020) (no consideration of class certification); In re NFL Players Concussion Injury Litig., 821 F.3d 410 (3d Cir. 2016) (certifying Rule 23(b)(3) settlement class—consisting of two separately represented subclasses—for concussion claims against a single defendant based on a single alleged course of conduct); In re Oil Spill by the Oil Rig Deepwater Horizon, 295 F.R.D. 112 (E.D. La. 2013) (certifying Rule 23(b)(3) class for settlement in a single-event, single-location case against a single defendant under federal maritime law); Bovee v. Coopers & Lybrand, 216 F.R.D. 596 (S.D. Ohio 2003) (certifying Rule 23(b)(3) class against accounting firm for federal securities-fraud claim); In re Telectronics Pacing Sys., Inc., 172 F.R.D. 271 (S.D. Ohio 1997) (certifying numerous statelaw-specific, separately represented subclasses under Rules 23(b)(1) and (b)(3) to litigate claims based on one defect in two nearly identical pacemaker leads made by one manufacturer that already had a defect research program in place, where the Sixth Circuit subsequently reversed certification of a (b)(1) settlement class, In re Telectronics Pacing Sys., Inc., 221 F.3d 870, 882 (6th Cir. 2000)); Donovan v. Philip Morris USA, Inc., 268 F.R.D. 1 (D. Mass. 2010) (certifying "narrow" class of 20-pack-year smokers of one brand of cigarettes in one state for implied-warranty and statestatutory claims—but not negligence claims—in a "unique" case under a "uniquely circumscribed" approach); Sutton v. Hoffman-La Roche Inc., Nos. A-5545-18T3 et al. (N.J. Super. Ct. App. Div. May 27, 2020) (non-precedential decision allowing property damage class for 400 properties contaminated by unspecified emissions from a single industrial site under New Jersey class certification standard that "has always been more liberal than the federal standard" and is "even more so than before").

period. There is no support for certification of such a non-cohesive class; the class does not even satisfy commonality, far less cohesion. *See Ball*, 385 F.3d at 728.

The Court could stop now and hold that Hardwick has not established the cohesiveness (or even commonality) required for Rule 23(b)(2) class actions. But Hardwick's class-certification request has many more problems.

II. HARDWICK'S PROPOSED RELIEF ALSO DEFEATS RULE 23(B)(2) CERTIFICATION.

In addition to Hardwick's failure to establish the cohesiveness required for a Rule 23(b)(2) class, Hardwick also fails (b)(2)'s requirement that "a single injunction or declaratory judgment would provide [final] relief to each member of the class." *Dukes*, 564 U.S. at 360; *see* Fed. R. Civ. P. 23(b)(2) (providing that there must be "final injunctive relief or corresponding declaratory relief" that applies to "the class as a whole").

A. Hardwick Has Failed To Explain the Supposed Classwide Relief.

As an initial matter, it is not at all clear what the class's proposed judgment would be—which alone defeats certification under Rule 23(b)(2). Hardwick bears the burden of proving that he seeks relief suitable for (b)(2) certification. *Am. Med. Sys.*, 75 F.3d at 1086. And when a plaintiff fails to "describe the equitable relief sought in sufficient detail that the district court can conceive of an injunction that comports with the requirements of Rule 23(b)(2) and 65(d)," the district court must deny certification. *E.g.*, *Vallario v. Vandehey*, 554 F.3d 1259, 1267–68 (10th Cir. 2009).

That aptly describes the motion here. When asked directly, Hardwick refused to share any details about the relief his motion seeks. He would not answer Defendants' interrogatories asking for an explanation of such fundamental things as how the Court approved science panel would be selected and established, how the science panel would operate (or even at what stage of the case it

would kick in); whether the science panel's findings would be binding on the class; whether he was expressly seeking medical-monitoring relief; or his plan for trying this mandatory class action. *See, e.g.*, Ex. 11 (Pl.'s Resp. to Solvay); Ex. 12 (Pl.'s Resp. to DAI) at No. 1 (arguing, among other things, that details regarding the medical monitoring Plaintiff seeks constitutes protected work-product and is not relevant to class certification). All of these are relevant to class certification for many reasons, not least because they affect whether Plaintiff is really requesting "final injunctive relief or corresponding declaratory relief" that can possibly apply to "the class as a whole." Fed. R. Civ. P. 23(b)(2); *see Dukes*, 564 U.S. at 360.

Nor has Hardwick otherwise provided any level of detail about the vaguely described "medical monitoring program and scientific studies/scientific panel" the motion seeks on behalf of the class. Mem. 42. He does not explain, for instance, who will be monitored, for what conditions, over what period of time, or how or by whom any proposed "scientific studies" will be designed or conducted. Nor does he support with any expert analysis the purported ability to conduct any sort of classwide monitoring or scientific studies. *Cf.* Herzstein Rep. 2–4 (medical monitoring); Alexander Rep. 4–8, 14–16 (feasibility of the epidemiology). Under these circumstances, Hardwick has failed his burden of showing that the class's requested injunctive relief satisfies Rule 23(b)(2) and Rule 65(d), which alone defeats certification. *E.g.*, *Vallario*, 554 F.3d at 1267–68.

B. The Relief that Plaintiff Possibly Seeks Fails to Provide Final Injunctive Relief Uniformly to Each Class Member.

To the extent the Court can ascertain what Plaintiff seeks as injunctive relief, that relief does not satisfy Rule 23(b)(2)'s requirements—for two reasons: (1) The relief does not apply uniformly "to each member of the class," *Dukes*, 564 U.S. at 360, and (2) the relief is not "final"

injunctive" relief, Fed. R. Civ. P. 23(b)(2) (emphasis added). *See* 7AA Fed. Prac. & Proc. Civ. § 1775 (3d ed.) (laying out these two prongs of Rule 23(b)(2) relief).

1. No classwide injunction. Rule 23(b)(2) requires a single injunction across all class members—here, a single, classwide injunction binding all 330 million would-be members; it "does not authorize class certification when each individual class member would be entitled to a different injunction or declaratory judgment against the defendant." *Dukes*, 564 U.S. at 360–61. Neither form of class relief here—(i) undefined "medical monitoring" and (ii) amorphous "nationwide medical and epidemiological studies," Mem. 49–50—meets that requirement.

First, as to the unspecified "medical monitoring," Hardwick has not even indicated what conditions the 330 million-member putative class would be monitored *for*, far less how any medical monitoring would be administered. And for good reason: as explained in the expert report of Dr. Jessica Herzstein, a leading expert in medical monitoring, determining whether any putative class member is entitled to medical monitoring, and determining what sort of monitoring (if any) is appropriate, would necessarily be individualized—based on each putative class member's quantity and type of PFAS exposure, underlying health conditions, existing medical treatment, and more—to account for any illnesses for which that particular individual is even possibly at a heightened risk. See, e.g., Herzstein Rep. 2.

Medical monitoring is appropriate only when, for a particular individual, (i) the health effects associated with exposure to a specific hazardous chemical are established and (ii) the specific disease(s) associated with that exposure is known. *Id.* at 7–8. And even when those two requirements are met, (iii) the person to be screened must be at a *significantly* increased risk of that disease as a result of exposure in order for the program to offer a health benefit. *Id.* at 7.

Each of those three basic aspects of medical monitoring is individualized, making Hardwick's blanket request for monitoring across the entire country fundamentally flawed:

- As to the health effects associated with exposure, "[w]hether any individual is at a significantly increased risk of disease due to exposure depends on the individual's relative exposure to PFAS and individual characteristics, assuming any elevated risk exists at all." Herzstein Rep. 2. "The risk of adverse effects depends on several factors, including the exposure dose, the frequency of exposure, the route and duration of exposure, and the time of exposure during the lifecycle," and "[h]ealth risks associated with PFAS... are also influenced by many other environmental, social, or genetic factors." *Id.* at 20.
- As to the specific disease or diseases associated with PFAS, Hardwick offers nothing, relying instead on disease *generally*. But this conflicts with medical monitoring basics and with PFAS toxicology, as explained above. Relatedly, the motion's threshold level of exposure—0.05 ppt of PFOA and 0.05 ppt of any other PFAS—is not supported by science and, if accepted, would mean that nearly the entire population of the United States should receive special testing for supposed PFAS-exposure-related conditions. Herzstein Rep. 3, 20–22.
- This cost-benefit analysis of whether to order monitoring—which is why monitoring is ordered only when a person has a *significantly* increased risk of disease from exposure—is also individualized. Herzstein Rep. 6, 9–10. Ultimately, the appropriateness of medical monitoring depends on "highly individualized" questions such as the disease being monitored and the potential risks of the contemplated monitoring program itself. *Id.* at 2–3. Medical monitoring would be inappropriate or unnecessary for some individuals even when it could be appropriate for others at the same type and level of exposure, such as when the disease is already being screened as part of an individual's typical medical care regimen administered by their own personal physicians. *Id.* at 2. Medical monitoring will also be unhelpful for individuals with diseases where (i) early detection is not possible or (ii) there is no medical advantage to the early detection of the disease. *Id.* at 2, 3, 7, 17. And yet the motion groups everyone in this diverse country together, thus proposing to subject "persons to unnecessary testing to no advantage, while raising the risk of various adverse outcomes." *Id.* at 18–19.

Accordingly, this form of relief does not constitute a single injunction that would provide relief to each member of the class, as it must under Rule 23(b)(2). The motion's medical-monitoring program, to the extent it offers one, cannot "prove the medical necessity" of monitoring across the entire country "without further individualized proceedings to consider class members' individual characteristics and medical histories and to weigh the benefits and safety of a monitoring program." *E.g.*, *Gates*, 655 F.3d at 269 (affirming denial of class certification for this reason); *see also*, *e.g.*, *Thompson v. Am. Tobacco Co.*, 189 F.R.D. 544, 555 (D. Minn. 1999)

(denying certification because of the need for "fashioning individualized medical monitoring programs for each Plaintiff," and because "an individual's need for medical monitoring above and beyond that of the general . . . public cannot be determined in a class-wide basis"); *In re MTBE Prods. Liab. Litig.*, 209 F.R.D. 323, 344 (S.D.N.Y. 2002) (denying Rule 23(b)(2) certification because "[i]f this Court were to grant plaintiffs' request and issue [the proposed injunctive relief] to the class, it could not do so without crafting a specific remedy for each class member").⁷⁰

Second, Hardwick's other form of relief—amorphous "nationwide medical and epidemiological studies"—would not provide relief to "each member of the class" through a single injunction any more than unspecified, nationwide monitoring would. Dukes, 564 U.S. at 360.

To satisfy Rule 23(b)(2), this study would have to determine *on a classwide basis* whether thousands of different types of substances at different exposure levels and in different combinations affect the risk of different ailments in different groups of 330,000,000 individuals over different periods of time. To describe that hypothetical study is to show that it would be highly individualized.

The motion, for its part, fails to explain how any study—the design of which is never offered—could possibly provide uniform relief for each class member. So the only evidence in the record on what such a study would look like comes from Dr. Dominik Alexander, an expert in

The Even aside from these individualized issues, many courts have treated requests for medical monitoring as a form of damage relief, so that Rule 23(b)(2) certification is inappropriate. See, e.g., Dukes, 564 U.S. at 360–61 (Rule 23(b)(2) "does not authorize class certification when each class member would be entitled to an individualized award of monetary damages"); Paternostro v. Choice Hotel Int'l Servs. Corp., 309 F.R.D. 397, 403 (E.D. La. 2015) (holding, where plaintiffs sought medical monitoring, that "the relief sought here is primarily monetary," such that Rule 23(b)(2) certification is inappropriate); Barraza, 322 F.R.D. at 386–87 (denying Rule 23(b)(2) certification, because medical monitoring did not constitute injunctive relief); see also Gates, 655 F.3d at 263 ("question[ing]," in light of Dukes, whether medical monitoring classes "can be certified under Rule 23(b)(2)"). For this reason, too, this supposed (b)(2) class cannot be certified.

epidemiology. And he confirms what is intuitive: No "nationwide medical and epidemiological studies" of the sort conceived of by the motion could provide single classwide relief. Dr. Alexander explains that, for example, it is impossible to study the synergistic effect of what the class definition proposes: PFOA and 5,000 different types of PFAS across 330 million people. Alexander Rep. 14–15. Dr. Alexander also explains that the motion has failed to articulate a plan for a feasible study even for a single PFAS or a distinct group of PFAS (let alone the approximately 5,000 PFAS). Id. at 5. Any of these kinds of studies, and especially the study the motion apparently seeks, would need to account for potential synergistic effects to various PFAS, as well as the confounding influence of other PFAS in individuals' blood serum. *Id.* at 14–15. But there are no proposed mechanisms, safeguards, or controls to address the myriad confounding factors that would undermine a comprehensive, nationwide study of this magnitude. *Id.* at 14–16.

Dr. Alexander also clarifies that there is no possible comparison to the *Leach* Settlement Science Panel—and in fact that the Leach Settlement Science Panel shows that the motion's proposed studies would be impossible on this scale. Id. at 7-8. The Leach Settlement Science Panel conducted only a limited assessment of one PFAS compound (PFOA), and it still took approximately seven years to reach its final conclusions.⁷¹ By design and agreement of the parties, that assessment did nothing to establish any sort of causal link for PFOA or any other type of PFAS, as even Hardwick concedes.⁷² Nor was the *Leach* Settlement Science Panel looking for what the science panel here would be searching for: The Leach Settlement Science Panel investigated a "probable link," a defined term in the *Leach* settlement agreement that expressly fell well short of the evidence needed to find a scientifically conclusive causal link, as would be

⁷¹ C8 Panel, Panel See Background, available at http://www.c8sciencepanel.org/panel background.html. ⁷² Pl. Brief at 3.

sought here.⁷³ And many of the studies relied upon by the *Leach* Settlement Science Panel were cross-sectional, rendering them ill-designed or ill-equipped to scientifically address disease causation. *See* Alexander Rep. 8.⁷⁴ At bottom, then, the *Leach* Settlement Science Panel does not provide a roadmap for a comprehensive, scientifically conclusive study here; if anything, it shows that one is not possible. *See id.* at 7–8, 12–13.

It thus remains the case that the comprehensive study sought by the motion could not possibly "provide relief to each member of the class." *Dukes*, 564 U.S. at 360–61. Hardwick cites no on-point authority to the contrary.⁷⁵

Nor is any such study needed or appropriate. In his motion, Hardwick suggests that all other mechanisms of government have failed, leaving this Court as "the only option" to "address the massive health threat caused by Defendants' PFAS contamination." Mem. 30. Even ignoring Hardwick's unsupported and unjustified assertions that PFAS constitutes a "massive health threat" and that Defendants are categorically responsible for this alleged threat, the idea that this Court is

⁷³ C-8 Science Panel, Probable Link Reports, available at http://www.c8sciencepanel.org/prob_link.html#:~:text=A%20%22probable%20link%22%20in%20this,and%20a%20particular%20human%20disease.

⁷⁴ Cross-sectional studies examine the correlation between an exposure and the prevalence of a disease in a defined population at a specified point in time, thereby providing a "snapshot" of the potential exposure-disease relationship at a particular time. Because exposures and outcomes are typically assessed simultaneously in a cross-sectional study, it may not be possible to determine whether the exposure preceded or followed the disease, thereby obscuring cause-and-effect relationships. Thus, cross-sectional surveys are considered lower quality designs compared with the more analytically rigorous cohort and case-control designs and are insufficient to establish causation on their own. Alexander Rep. 27 & App'x A at 6.

Tellingly, Plaintiff does not cite any case law outside of the settlement context where a court has granted class certification for the purpose of forcing defendants to fund a study or science panel so that plaintiffs can attempt to meet *their* burden to prove causation. And even in the settlement context, such a procedure is constitutionally dubious. *See In re: RoundUp Prods. Liab. Litig.*, 2020 WL 32723305, *5–6 (N.D. Cal. July 6, 2020) ("Even with the consent of both sides, it's questionable whether it would be constitutional (or otherwise lawful) to delegate the function of deciding the general causation question . . . from judges and juries to a panel of scientists.").

"the only option" (or, indeed, the appropriate option) to study and address PFAS is not true. Academics, regulatory agencies, and public-health organizations have been studying and evaluating PFAS.⁷⁶ Hardwick apparently disagrees with the efforts undertaken to date regarding PFAS and beseeches this Court to substitute its judgment for that of the states, the branches of government to which these decisions are committed and the broader public health community. The Court may not do so—for Hardwick has proposed no relief that provides a single injunction across the class.

2. No final injunctive relief. Hardwick's requested forms of relief also fail to satisfy (b)(2) because they do not entail "final injunctive relief or corresponding declaratory relief." Fed. R. Civ. P. 23(b)(2) (emphasis added). To satisfy this requirement, the injunctive or declaratory relief must be final across the class; it may not merely be a step toward additional, individualized relief. See id.; 7AA Fed. Prac. & Proc. Civ. § 1775 (3d ed.).

Even the question whether *traditional* medical-monitoring relief satisfies this element has split courts around the country. *See* 7AA Fed. Prac. & Proc. Civ. § 1775 & nn.17–18 (collecting cases). And the motion's requested relief is anything but traditional. The "injunction" and other relief sought would not be the end of this legal pursuit but instead would merely be the first step in a process that is intended to lead to follow-on lawsuits for damages (should the "science panel" link PFAS to some health condition in humans). Plaintiff is open about this, purportedly modeling this request after the *Leach* Settlement Science Panel. *See, e.g.*, Am. Compl. ¶ 79. But that panel was the product of a bilateral settlement, not a judicial order. Further, Rule 23(b)(2) does not allow plaintiffs to use the class device as a first stage in an incremental process. Such a result is

⁷⁶ See, e.g., n.48, supra.

inconsistent with the Rule's requirement that any injunctive or corresponding declaratory relief be "final."⁷⁷

Andrews v. Chevy Chase Bank, 545 F.3d 570 (7th Cir. 2008), is instructive on this score. Plaintiffs there, seeking certification of a Rule 23(b)(2) class action, requested a declaration that class members were entitled to rescind certain loan transactions with the defendant. The Seventh Circuit held that such a use of Rule 23(b)(2) would be improper, noting the rule's requirement that any relief awarded be "final." Id. at 576–77. As the court stated, "a declaration of a 'rescission class' would only initiate a process of individual rescission actions." Id. at 577 (emphasis in original). And an order that merely initiates future relief would be "essentially advisory" and "is not a form of 'final' declaratory relief under Rule 23(b)(2)." Id. Put differently, it is not enough that the remedial order, whether injunctive or declaratory, "affects the entire class; [an] order [that] merely establishes a system for eventually providing individualized relief" does not, on its own, "provide 'final' relief to any class member" and thus does not satisfy Rule 23(b)(2). Jamie S. v. Milwaukee Pub. Schs., 668 F.3d 481, 499 (7th Cir. 2012). Just so for Hardwick's proposed "initiation" class here, which would do little more than set the stage for a multiplicity of individual follow-on personal injury lawsuits (if the findings go Hardwick's way).

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Hardwick's requested declaratory relief is no more "final" than his requested injunction. Rule 23(b)(2) does not allow for certification of a class seeking declaratory relief as such; declaratory relief must be "corresponding" to a request for "final injunctive relief." Fed. R. Civ. P. 23(b)(2). And "[d]eclaratory relief 'corresponds' to injunctive relief" only "when as a practical matter it affords injunctive relief or serves as a basis for later injunctive relief." Fed. R. Civ. P. 23(b)(2) advisory committee notes to 1966 amendments. Hardwick's requested declaration—that Defendants are liable to the class—does not do anything remotely like that. That request is also improper, for "[d]eclaratory judgments are not meant simply to proclaim that one party is liable to another." *Johnson v. McCuskey*, 72 F. App'x 475, 478 (7th Cir. 2003); *see also Corliss v. O'Brien*, 200 F. App'x 80, 84 (3d Cir. 2006) (same).

The lack of finality here is even worse than in those cases, for the science panel's findings may not be "binding." Hardwick testified that the "binding findings" he purports to seek from his science panel would be binding only if the panel's conclusions are *helpful* to him and the class in establishing a link between PFAS and a class member's present or future illness. If not, then Hardwick does not intend for those findings to be binding at all. This "heads I win, tails you lose" approach to the declaratory and injunctive relief guts the very notion of finality. As a result, certification under Rule 23(b)(2) is inappropriate.

III. THE CLASS DEFINITION MAKES THE CLASS UNCERTIFIABLE.

To this point, the brief has shown the uncertifiable nature of the proposed class under Rule 23(b)(2) itself (and under (a)(2)'s commonality requirement)—in arguments that apply to any nationwide class of the almost indescribable breadth that the Court has before it here. But there are also problems more specific to the particular class that the motion proposes here—first that the proposed class definition makes certification impossible.

It should go without saying that, "[a]s part of [the] endeavor" to certify a Rule 23(b)(2) class action, the Court must be able to "define the class." *Ball v. Kasich*, No. 2:16-CV-282, 2018 WL 6437426, at *4 (S.D. Ohio Dec. 7, 2018) (Sargus, J.) (quotation omitted); *see also* 7A Fed. Prac. & Proc. Civ. § 1760 (3d ed.) ("[A]n essential prerequisite of an action under Rule 23 is that there must be a 'class."). The "required rigorous analysis" of any class-certification motion, therefore, "includes examination of[] the proposed definition of the class." *Edwards v. McCormick*, 196 F.R.D. 487, 490 (S.D. Ohio 2000).

As with other requirements of Rule 23, it falls on "[t]he party moving to certify" to "sufficiently define the class." *Brown*, 211 F.R.D. at 326 (Sargus, J.); *see Brashear v. Perry Cnty.*, No. 6:06-143-DCR, 2006 WL 3021135, at *3 (E.D. Ky. Oct. 23, 2006); *see also* Mem. 36 (conceding that "Plaintiff has the burden to adequately define the proposed class"). A "[k]ey

element[]" of this burden requires the plaintiff to "specify[] a particular group that was harmed during a particular time frame, in a particular location, in a particular way." *Brown*, 211 F.R.D. at 326 (Sargus, J.).

1. Hardwick comes nowhere near meeting his burden of adequately defining the class; nothing about his class definition—not the group that was harmed, not the time frame, not the location, and not the way—is "particular."

Hardwick proposes to define the class to include, with certain exceptions (such as the Court and counsel), "any individual residing within the United States at the time of class certification for one year or more since 1977 with 0.05 parts per trillion (ppt) of PFOA and at least 0.05 ppt of any other PFAS in their blood serum"—some 330 million people. Mem. 4. He provides no reason why the definition dates back to 1977, which this Court found important in *Brown*. 211 F.R.D. at 326. Nor does he offer any expert evidence or any rationale in support of this definition. Requiring both PFOA and another kind of PFAS, at arbitrarily selected levels, is based on laypersons' speculation rather than any scientific evidence. Perhaps worst of all, Hardwick has declined to provide any evidence to support his threshold requirement of 0.05 ppt or any cumulative or synergistic relationships between PFOA and other forms of PFAS. This is a class definition cut from whole cloth by laypeople.

Defendants could have left it at that—after all, by Hardwick's own admission, he bears the burden of demonstrating that his putative class is adequately defined. But Defendants offered Hardwick another chance to explain the rationale for his class definition. One defendant served an interrogatory asking for the scientific basis of the class definition, and another served an interrogatory asking for Hardwick's plan for implementing it. Ex. 13 (DuPont's First Set of Interrogatories); Ex. 14 (Archroma's First Set of Interrogatories). And yet Plaintiff refused to

answer either interrogatory, thus ensuring that his burden remained unmet. Ex. 15 (Plaintiff's Responses/Objections to DuPont's First Set of Interrogatories); Ex. 16 (Plaintiff's Responses/Objections to Archroma's First Set of Interrogatories).

Had Hardwick relied on experts, rather than a layperson's say so, he would have learned that his proposed class definition is—and we do not say this lightly—absurd in several ways.

For starters, it is impossible to test for PFAS blood serum concentrations as low as 0.05 ppt. As Dr. Dallas Wait (an expert analytical chemist) explains, the proposed class definition's concentration criterion—0.05 parts per *trillion*, or 0.00005 ng/ml—is 2,000 times lower than detection limits currently achievable by commercial toxicological or forensics laboratories for any PFAS, much less all PFAS in blood serum. Wait Rep. 3–4. This is "orders of magnitude" below the current detection limit for the most well-known and commonly tested-for PFAS. *Id.* at 3.

But even if testing for concentrations that low could be achieved, it would require a ludicrous process. As Dr. Wait further explains, testing down to 0.05 parts per trillion would require many times more as much blood as a typical laboratory blood draw. Wait Rep. 7. What's more, because the general population is not normally tested for PFOA or PFAS, knowing who is in the class and bound by any judgment would require hundreds of millions of people to submit potentially vast quantities of blood to specialized labs. *Id*.

To add insult to injury, it is entirely unclear what each laboratory would be testing for: as Dr. Reitman (an expert in polymer sciences) points out, the "any other PFAS" on which class membership is conditioned is poorly defined—which is why regulators and others cannot agree on

what that umbrella term includes. Reitman Rep. 4. Nor can they test for it: there are no accepted or validated methods of testing for most PFAS in blood. Only a limited number of PFAS compounds have been analyzed in blood serum, and methods to detect the "vast majority" of PFAS compounds in blood serum do not yet exist. Wait Rep. 5. The CDC testing methods, which are generally in line with the capabilities of commercial laboratories, test for 8 to 12 different PFAS, and the most inclusive methods published in recent scientific literature tested for 43 PFAS. *Id.* at 5–6. It is not at all clear how Hardwick intends to identify individuals with the PFAS compounds in their blood for which no detection method yet currently exists, let alone at the undetectable levels that define the class.

And there is still more. Hardwick wants *Defendants to pay* for all of the testing that this mere identification of potential class members would require, to the tune of hundreds of billions of dollars

The lower the detection limits

the more labor-intensive and expensive it is to test.

Wait Rep. 7. When researchers test at detection levels ranging from 0.001 to 0.006 ng/ml

they recommend analyzing no more than 20 serum samples per day, followed by a rigorous 9-hour cleaning process. *Id.* These modifications place severe limits on the number of samples that can be processed (and increase the expense per sample), which renders their method unsuited for large scale biomonitoring purposes. *Id.* Here, Hardwick apparently seeks to test the blood of 330 million potential class members at detection levels that are likely not possible and certainly not feasible. Nor does Hardwick grapple at all with the practical reality that many potential class members will not *want* to have their blood samples taken and tested.

All of this also puts the cart before the horse. A class definition cannot use part of the relief sought in the lawsuit—here, testing, at Defendants' expense—to determine class membership. *See Romberio*, 385 F. App'x at 433 (holding that "[c]lass certification . . . was an abuse of discretion" where the defendant "would have to provide the very relief requested [] in order to determine whether any individual was, in the first instance, a class member"). Forcing Defendants to pay hundreds of billions of dollars just to determine who is in the class would make a mockery of Rule 23 and trample Defendants' due process rights.

In sum, as class definitions go, this one is the very definition of inadequate: it is confusing, unsupported, and impossible to implement.

2. Hardwick has tried to cut off these arguments by asserting that "ascertainability" is not a requirement for a Rule 23(b)(2) class. Mem. 36; *Cole v. City of Memphis*, 839 F.3d 530, 542 (6th Cir. 2016) (declining to apply "ascertainability" requirement to plaintiff's motion to certify Fed. R. Civ. P. 23(b)(2) class). But the issues addressed above do not concern whether the class is merely "administratively [un]feasible," *Young v. Nationwide Mut. Ins. Co.*, 693 F.3d 532, 538 (6th Cir. 2012), the test for ascertainability; rather, the class definition here flunks the fundamental requirement of making sense, being adequately defined, and having support in the record—that is, of being a "class" at all. *See, e.g., Brown*, 211 F.R.D. at 326 (Sargus, J.); *Edwards*, 196 F.R.D. at 490. Because Hardwick has failed to meet his burden of showing that the class definition is adequate, the class cannot be certified regardless of any ascertainability requirement.

But Hardwick is wrong in arguing that there is no ascertainability requirement here. Ascertainability is implicit in Fed. R. Civ. P. 23, and does not change depending on the particular subpart of Rule 23(b) under which the plaintiff moves.⁷⁸

Neither does *Cole* help Hardwick. *Cole* did not hold that there is no ascertainability requirement whenever the plaintiff seeks certification under Rule 23(b)(2). *Cole* was a civil-rights case, for which Rule 23(b)(2) is particularly well-suited. *See* Advisory Committee Notes to 2003 Amendment to Fed. R. Civ. P. 23(b)(2). This case is of course different, not only in subject matter but in requested relief. *Cole*, 839 F.3d at 542 (explaining that the "focus in a (b)(2) class is more heavily placed on the nature of the remedy sought"). *Cole* involved a *prohibitive* injunction. The plaintiff sought to enjoin a police practice of clearing Beale Street in Memphis at a particular time of day—that made it unnecessary for the Court to identify putative class members, because the City of Memphis would be required to stop the practice altogether, not merely as applied to certain individuals. Here, by contrast, Hardwick seeks a *mandatory* "injunction" requiring Defendants to, among other things, provide and pay for medical monitoring only for people who satisfy the requirements of his putative class definition. To effectuate this "injunction," the Court would need to identify putative class members, because Defendants cannot be ordered to provide and pay for medical monitoring for non-class members.⁷⁹ *See, e.g., League of Women Voters of N.C. v.*

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⁷⁸ At any rate, this class definition, if accepted, would transform this into a Rule 23(b)(3) class, as it would require Defendants to pay money—and lots of it—just to determine class membership: Hardwick wants Defendants to pay for hundreds of billions of dollars of testing. Dep. 64:15–67:14. And no one disputes that Rule 23(b)(3) requires "ascertainability." *See Sandusky Wellness Ctr., LLC v. ASD Specialty Healthcare, Inc.*, 863 F.3d 460, 466 (6th Cir. 2017), as corrected (Sept. 1, 2017).

⁷⁹ All of Hardwick's other cases (*see* Mem. 36) also involve prohibitive injunctions that permitted complete relief without the need to identify each putative class member.

N. Carolina, 769 F.3d 224, 236 (4th Cir. 2014) (explaining differences between prohibitive and mandatory injunctions); Stanley v. Univ. of S. Cal., 13 F.3d 1313, 1320 (9th Cir. 1994) (same).

In sum: Hardwick has failed to meet his burden of showing that the class definition is adequate. Much to the contrary, his class definition is riddled with fatal flaws, each of which, taken alone, would bar class certification even apart from the other flaws in Plaintiff's motion.

IV. HARDWICK IS NEITHER AN ADEQUATE NOR A TYPICAL PLAINTIFF.

Hardwick fares no better in attempting to show that he is an adequate or typical plaintiff under Rule 23(a). Hardwick is neither, for four reasons: (A) resolving his claims does not necessarily resolve other class members' claims; (B) he is subject to unique defenses; (C) he cannot fairly protect the class's interests because of his conflicts with them; and (D) he cannot vigorously pursue these claims because he has handed the reins to class counsel and has no time to devote to proper management of a class action of the sort proposed here.

A. Hardwick Fails Typicality Because Resolving His Claims Does Not Necessarily Resolve Other Class Members' Claims.

Typicality rests on a straightforward premise: "as goes the claim of the named plaintiff, so [must] go the claims of the class." *Sprague v. Gen. Motors Corp.*, 133 F.3d 388, 399 (6th Cir. 1998) (en banc). "In pursuing their own claims, the named plaintiffs" must be able to "advance the interests of the entire" class. *Id.* If, instead, by pursuing his own claim the named plaintiff does not *necessarily* pursue the claims of all class members, typicality is not met. *Mays v. LaRose*, 951 F.3d 775, 793–94 (6th Cir. 2020); *see Gen. Tel. Co. v. Falcon*, 457 U.S. 147, 161 (1982). That occurs when, for example, the class members have different exposures to different products or when they "experience[] distinct difficult[ies]" with them. *E.g., Am. Med. Sys.*, 75 F.3d at 1082 (no typicality when there are different kinds of injuries after exposure to variations of the product). And that is true even in cases involving a single defendant's product.

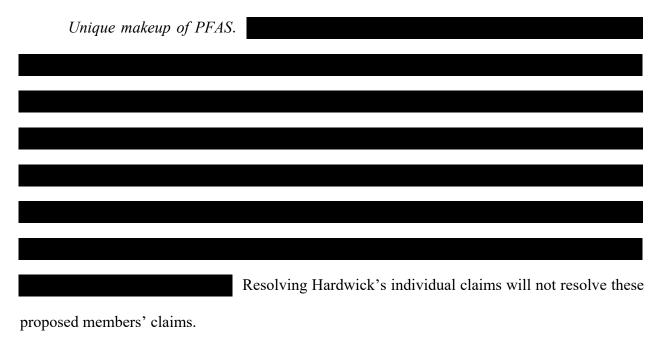
This case is far worse than that. At issue here are not variations of a single defendant's product or substance, but variations of *thousands* of different substances made, sold, and used by *eleven different Defendants* and *thousands of non-party manufacturers and sellers*. We have no idea what PFAS or PFAS-containing products are at issue for any given class member, and the variation among putative class members and exposures is nearly infinite. The claims of the putative members of this vast proposed class will not, therefore, rise or fall with Hardwick's particular claims, meaning typicality is not met. *Am. Med. Sys.*, 75 F.3d at 1082.

Consider just a few examples of how Hardwick's claims are distinct from other members of this 330-million-member proposed class.

Unique experiences as a firefighter. Firefighters are different when it comes to PFAS. See Beck Rep. 35–36. This Court could in theory resolve Hardwick's specific claims in a way that applies uniquely to his particular firefighting experience (including as a long-time airport firefighter during the 1990s and 2000s) without even beginning to resolve the claims for any non-firefighters (the hundreds of millions of them) or even other firefighters with their own unique experiences. According to Hardwick himself, after all, firefighters likely carry a higher risk of PFAS exposure compared to the general population. See Dep. 123:3–18; 168:6–19; 193:25–194:3. Hardwick was a firefighter who used AFFF throughout his career and would sometimes get "covered" in it. Id. at 157:18. He would train with AFFF once a week during his time with the Cincinnati/Northern Kentucky Airport. Id. at 211:23–212:4. And he would wear firefighter personal protective equipment, which he thinks is made with PFAS but very much worth wearing as the benefits of wearing it outweigh any purported risks of doing so. Id. at 177:10–178:14.

AFFF and seller of AFFF. This Court could also resolve this case in a way that applies to Hardwick's alleged exposure to PFAS from AFFF, but not in a way that would resolve anyone

else's claims relating to PFAS from AFFF or other sources. Hardwick not only used AFFF, but he also demonstrated and sold it to other firefighters. Dep. 92:21–94:19. In 2008 alone, he sold 200 gallons of AFFF to a former employer, the Cincinnati/Northern Kentucky Airport Fire Department. *Id.* at 93:21–94:19. As a seller and user, Hardwick would inevitably face questions about his knowledge, or his failure to obtain knowledge from MSDSs and other information available to him, that many other class members would not face. *See* Beck Rep. 23, 26, 35.



Lack of present injury. Hardwick has disclaimed any present illness or disease related to alleged exposure to PFAS. *Id.* at 153:10–154:3; Ex. 7 (Pl's Resps. to Arkema) at No. 5. Resolving the individual claims of a plaintiff like that will not at all (far less necessarily) resolve the claims of a class member who has a present illness or disease that the class member believes is caused by PFAS exposure.

At bottom, Hardwick's claims are necessarily keyed to certain types of PFAS, at certain amounts, through certain types of exposure that are, according to him, unknown and unconnected to any Defendant. Those claims are substantially different from putative class members' claims

that would be based on different types of PFAS at different levels and through different kinds of exposures from many different potential sources and products over many decades. The body of evidence required to assess Hardwick's claim would not necessarily resolve any other putative class member's claim. Hardwick's claims thus could go one way, but millions of other class members' claims could go the other way. He could "prove his own claim but not necessarily have proved anybody else's claim." *Beattie v. CenturyTel, Inc.*, 511 F.3d 554, 561 (6th Cir. 2007) (quotation omitted). That means his proposed class fails typicality. *See, e.g., Welding Fume*, 245 F.R.D. at 308–11; *Modern Holdings*, 2018 WL 1546355, at *9–10; *Burkhead v. Louisville Gas & Elec. Co.*, 250 F.R.D. 287, 296–97 (W.D. Ky. 2008).

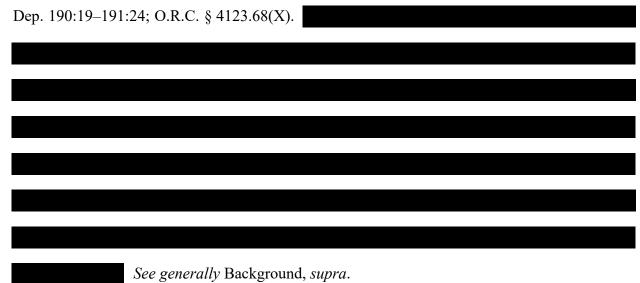
A recent case from the Sixth Circuit, *Mays v. LaRose*, illustrates the point. 951 F.3d 775 (6th Cir. 2020). The class members there, like the ones here, had superficial similarities. They all had been "arrested and held in detention in Ohio" during one weekend in November—"between close of business on Friday and the close of the polls on Election Day." *Id.* at 793. But looking at all beneath the surface, the class members had "substantially different claims" from one another because of the different circumstances and timing of their arrests. *Id.* Those who were arrested before a certain time could state a claim, whereas those who were arrested after that time could not. Thus, "the claims of the named plaintiffs do not necessarily resolve the claims of the entire class," and typicality was not satisfied. *Id.* at 794. The same is true, indeed much more so, here. This proposed class is not like a class of people arrested in Ohio on one weekend in November (itself insufficient); it is like a class of anyone arrested, anywhere, over the past forty-plus years, for whatever reason. *Cf. id.* at 793–94. It does not come close to satisfying typicality.

B. Hardwick Fails Typicality Because He Is Subject To Unique Defenses.

Hardwick fails typicality also because of atypical defenses that Defendants can and will assert against him. "It is well established that when a putative representative may be subject to

unique defenses, *i.e.*, a possible defense applicable only to him or a subset of the class that includes him, the representative cannot establish typicality and class certification must be denied." 1 McLaughlin on Class Actions § 4:18 (17th ed. Oct. 2020 update) (collecting cases).

Defendants here have defenses against Hardwick that will consume his time and that are or may be unavailable against countless other class members (though each case as to each individual involves its own unique set of circumstances). *See Mooradian v. FCA US, LLC*, 286 F. Supp. 3d 865, 870 (N.D. Ohio 2017); *see also, e.g., In re Cardinal Health, Inc. Sec. Litig.*, 226 F.R.D. 298, 310 (S.D. Ohio 2005). For example, PFAS aside, firefighters face health risks far beyond those of the general population. Dep. 193:25–194:3. They are exposed to many hazardous chemicals, many of which (unlike PFAS) are proven carcinogens. *Id.* 87:16–91:20. They have a much higher rate of certain cancers than the general population due to chemicals encountered in smoke. *Id.* 168:6–19. Indeed, under Ohio law, firefighters get a presumption for worker's compensation purposes that certain cancers are work-related—all having nothing to do with PFAS.



Hardwick also faces unique defenses based on his use of mil-spec AFFF and his access to AFFF MSDS warnings. He never looked at those warnings and thus would be subject to unique

arguments based on that. Dep. 248:20–23. Further, he would be subject to unique defenses or atypical defenses given his role in selling AFFF.

C. Hardwick Fails Adequacy Because of His Conflicts with the Putative Class.

Hardwick also flunks Rule 23(a)(4)'s adequacy requirement, which "serves to uncover conflicts of interest between named parties and the class they seek to represent." *Amchem*, 521 U.S. at 625 (citation omitted). "It is axiomatic that a putative representative" like Hardwick "cannot adequately protect the class if his interests are antagonistic to or in conflict with the objectives of those he purports to represent." *Rutherford v. City of Cleveland*, 137 F.3d 905, 909 (6th Cir. 1998) (citation omitted); *see Cross v. Nat'l Tr. Life Ins. Co.*, 553 F.2d 1026, 1031 (6th Cir. 1977). That is the case here: Hardwick's interests admittedly clash with those of the class.

This should come as no surprise, given that Hardwick seeks "to act on behalf of a single giant class" of people—over 330 million people, a class comprised of the nation, including many who are currently engaged in medical-monitoring and other litigation that would be devoured by this class—with diverse exposures to thousands of different chemicals at varying levels and widely different times. *Amchem*, 521 U.S. at 626. Take these four examples of real-world conflicts:

1. Current diseases or symptoms versus future-injury allegations only. This class fails for the same reason as the class in Amchem, 521 U.S. 591—because of the present-versus-future-injury conflicts. Hardwick is litigating this case on the premise that it matters not one whit whether he has any disease or has shown any symptoms allegedly linked to any kind of PFAS. Indeed, he has disclaimed any need to discuss any symptoms of any disease, contending that this Court should not consider them in ordering relief. Dep. 153:10–154:3; Ex. 7 (Pl's Resps. to Arkema) at No. 5. And that makes sense, too, for a plaintiff who has suffered no current symptoms or disease (or even any claimed risk of disease or symptoms) from PFAS.

But we know that there will be (and are now) absent class members with currently existing diseases or symptoms they allege are from PFAS. And they would certainly not be happy with Hardwick's concession—indeed the principal theory of his case—that risk and causation are not known and need to be studied. They would very much want to put their actual diseases and symptoms in the fore of this case—and argue that they can *prove* risk and causation, rather than first sue to find out. Imagine someone with high levels of some type of PFAS who lived near some company's (including a non-party) plant and who developed a cancer allegedly because of the company's PFAS. That person will not be fairly represented by Hardwick, someone who swears away any actual diseases or symptoms.

Hardwick may try to wiggle out from this certification-precluding defect by citing his footnote that attempts to exclude "any individual who has already released or filed claims for any diagnosed or manifest disease or manifest sickness that such individual attributes to Defendants' release of PFAS." Mem. 4 n.2. But even setting aside the vagueness of that exclusion (for example, it does not seem to include already-filed claims that do not require manifest sickness), it does not exclude people who will allege present illness after certification—who have not *already* filed claims—including those who might incur illnesses or injuries during what could be the many years that it takes for the unspecified science panel to conduct the unspecified studies proposed by Hardwick. *Id*.

2. Type of relief—research versus money. That leads to a second conflict: the relief Hardwick seeks. Conflicts in the relief requested, as exist here, are quintessential examples of conflicts that preclude adequacy. See, e.g., Amchem, 521 U.S. at 626.

People who are symptomatic will not want studies; they will want money or monitoring, and will want to obtain it without waiting for the unspecified studies to be conducted. And yet

Hardwick seeks, for himself, only "knowledge" about any PFAS effects. Dep. 133:5–134:11. He disclaims seeking any medical monitoring or monetary relief, putting him in conflict with class members seeking or wanting to seek money, monitoring, or other relief. *Id.* There is no need to speculate about this: Other putative class members are already suing these Defendants and many non-parties for money damages in medical-monitoring and other cases, see, e.g., In re AFFF Prods. Liab. Litig., No. 2:18-mn-2873 (D.S.C.); Lindsey v. 3M Company, No. 5:15-cv-1750 (N.D. Ala.), and (even if Hardwick is able to artificially carve those out) others will in future cases, too. Whereas Hardwick wants scientific studies (and possibly some undefined but necessarily generic medical monitoring), others will want tailored and more specialized monitoring. And others may care little about monitoring but instead want money for alleged economic losses or battery or mental anguish or loss of property use and enjoyment or remediation or property value impacts. Still others would want to add claims against a multitude of entities not before the Court in this suit, whether they be governmental or municipal bodies, product manufacturers, site owners, or others, in order to improve their chances for success or to seek fuller monetary and other relief from entities more closely tied to particular PFAS exposures. Still other absent class members may have no claim whatsoever related to PFAS and no interest in the non-opt out class Plaintiff seeks.

3. Type and level of PFAS. The motion's requested class relief creates other conflicts that make Hardwick an inadequate representative. In processing Hardwick's injunctive relief, conflicts will inevitably arise between Hardwick and the class members. Determinations will need to be made about who gets monitoring for which chemicals and at which levels: a medical-monitoring class cannot comprise the general population. Herzstein Rep. 3. And some chemicals at least at some levels will be left out, and thus some class members will be left out. Hardwick is unsuited

to be	the	class	representative	tor	all.
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He cannot, in short, be the class representative for millions of people exposed to thousands of different chemicals in different amounts and ways. Beck Rep. 4–5.

4. Exposure—Hardwick versus other firefighters. Hardwick's type of exposure creates conflicts between Hardwick and other firefighters. Hardwick demonstrated and sold AFFF to other firefighters. Dep. 92:21–94:19. As just one example of Hardwick's distribution of AFFF, in 2008, he sold 200 gallons of AFFF to a former employer, the Cincinnati/Northern Kentucky Airport Fire Department. Id. at 93:21–94:19. The firefighters exposed to PFAS from the AFFF Hardwick sold to them, including his former colleagues at the CVG Airport Fire Department, will have possible claims against him.

All of this also raises the possibility of impermissible claim splitting, further making Hardwick inadequate and the class improper. The proposed class litigation (which, again, does not allow opt-outs) would interfere with separate medical-monitoring and other litigation that some Americans have chosen or would choose in the future. In this way, this case is like *Burkhead*—where the named plaintiffs had "voluntarily foregone their [individual] personal injury claims" for damages and tried to impose that decision on the class. 250 F.R.D. at 296–97. Other class members, however, understandably did not want to give up their claims for damages, and thus the lead plaintiff in such a scenario was held not to be an adequate one. *Id*.⁸⁰ Just so here, where other

⁸⁰ See also Teflon, 254 F.R.D. at 366–68; Henke v. Arco Midcon, L.L.C., No. 4:10-CV-86, 2014
WL, at *11 (E.D. Mo. Mar. 12, 2014); In re Fosamax Prod. Liab. Litig., 248 F.R.D. 389, 401
(S.D.N.Y. 2008); Krueger v. Wyeth, Inc., 2008 WL 481956, at *3 (S.D. Cal. 2008); MTBE, 209

class members will not want to give up their own monetary and other claims for medical monitoring and a wide variety of alleged injuries in the future but would not have the option to opt out of this Rule 23(b)(2) class action if certified.

D. Hardwick Fails Adequacy Because of His Lack of Knowledge of His Case.

Hardwick's lack of knowledge about the facts and fundamentals of his case means that he cannot vigorously pursue it, which independently defeats adequacy. *See Bond v. Antero Res. Corp.*, 328 F.R.D. 187, 196 (S.D. Ohio 2018).

As for the "facts . . . comprising [his] case," Hardwick lacks basic knowledge. In re AEP ERISA Litig., No. C2-03-67, 2008 WL 4210352, at *2 (S.D. Ohio Sept. 8, 2008). He could not name a single kind of PFAS, Dep. 39:7–13; 39:18–20; he admits that he does not know what PFAS are, how many there are, or how they differ from each other or from other chemicals, Dep. 38:21-39:6; 39:14–17; and he does not know the testing limits for any PFAS, Dep. 231:20–232:1. See Roundtree v. Cincinnati Bell, Inc., 90 F.R.D. 7, 10 (S.D. Ohio 1979). And as for the fundamentals of his claims, Hardwick is equally uninformed—and actually splits from counsel on major decisions such as whether his relief would be binding on the class or even himself. Dep. 135:20– 137:4. He did not choose which companies to sue and could not name any Defendant or any specific Defendant's products, id. at 75:24–76:1; 233:1–6; he has "no idea" why the proposed class is defined as it is or how he would determine who is a member, id. at 109:3–22; and he does not know what tests, if any, could be used, how much those tests would cost, or the risks associated with the tests themselves, id. at 238:3–239:5. This lack of knowledge of the facts and fundamentals is made worse by the reality that Hardwick is ill-equipped to spend much time on this suit—he currently works 15 hours a day, 7 days a week (Dep. 164:20–165:11)—and thus would struggle,

F.R.D. at 338–40; *Clark v. Experian Info. Sols., Inc.,* 2001 WL 1946329, at *3–4 (D.S.C. 2001); *Thompson,* 189 F.R.D. at 550–51.

even if he knew much about his case, to actively supervise the work of counsel and protect the interests of such a massive and disparate class.

Hardwick seeks to assuage these concerns by pointing to his able counsel. *See id.* at 75:24–76:1; 109:11–18; 232:3–14. But a proposed representative's inadequacy cannot be "compensated by the enthusiasm of [his] lawyers." *Smyth v. Carter*, 168 F.R.D. 28, 33 (W.D. Va. 1996). Adequacy instead exists to ensure that "*named plaintiffs*" are "willing and able to monitor the work of class counsel." *AEP*, 2008 WL 4210352, at *2 (emphasis added). While Rule 23(g) requires scrutiny of the proposed class counsel's adequacy (and is not challenged here), the class representative must stand on his own two feet under Rule 23(a)(4). *Id.* (collecting cases). Hardwick—who "undu[ly] rel[ies] on counsel," is "unfamiliar with his own [case]," and appears to be a mere "puppet[] for class counsel," *id.* (quotation omitted) (collecting cases)—cannot.⁸¹

V. HARDWICK'S PROPOSED CLASS CANNOT BE CERTIFIED BECAUSE DOING SO WOULD VIOLATE THE CONSTITUTION.

Certifying a non-opt-out class in this case cannot be done consistent with the Constitution. It would violate Article III, the Seventh Amendment, and due process.

A. This Court Lacks Article III Jurisdiction Because Hardwick Lacks Standing.

A class cannot be certified if the named plaintiff lacks standing. *See, e.g., Frank v. Gaos*, 139 S. Ct. 1041, 1046 (2019) (per curiam); *O'Shea v. Littleton*, 414 U.S. 488, 494 (1974). The question whether Hardwick has standing is not new to this case, but the facts and posture are. At the motion-to-dismiss stage, the parties litigated standing, and the Court found that Hardwick had alleged the three standing elements—injury-in-fact, traceability, and redressability. *See* MTD Op.

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⁸¹ See, e.g., Monroe v. City of Charlottesville, 579 F.3d 380, 385 (4th Cir. 2009); Berger v. Compaq Computer Corp., 257 F.3d 475, 482 (5th Cir. 2001); Maywalt v. Parker & Parsley Petroleum Co., 67 F.3d 1072, 1078 (2d Cir. 1995); Kirkpatrick v. J.C. Bradford & Co., 827 F.2d 718, 727–28 (11th Cir. 1987); In re Monster Worldwide, Inc. Secs. Litig., 251 F.R.D. 132, 136 (S.D.N.Y. 2008); In re Microsoft Corp. Antitrust Litig., 214 F.R.D. 371, 374–75 (D. Md. 2003).

16. The Court based its Article III holding on the allegations of "an increased risk of disease" to Hardwick because of the PFAS in his blood; traceable to "each Defendant"; and redressable with "damages and medical monitoring." *See* MTD Op. 16–21. At that time, though, the Court could consider only the pleadings. Because the case has moved "beyond the pleading stage" to class certification, "the Court must now look beyond the allegations of the complaint and assess whether record evidence supports" standing. *In re Terazosin Hydrochloride*, 220 F.R.D. 672, 680 (S.D. Fla. 2004) (citation omitted); *see Lujan v. Defs. of Wildlife*, 504 U.S. 555, 561 (1992).

Hardwick can no long carry his burden to establish his standing because he has run away from the allegations on which this Court based its standing decision:

• He no longer claims that he is at "an increased risk of disease," MTD Op. 16; he now admits that he is suing to "learn [his] personal risk," because he does not "know what these chemicals can potentially do." Dep. 133:21–134:1 (emphasis added), id. at 136:17–18.

he now admits that he "ha[s] no idea" if he was "ever . . . exposed" to PFAS from any of Defendants' products or chemicals, *e.g.*, Dep. 68:25, 69:15–19, 71:10; Ex. 17 (Plaintiff's Revised Responses and Objections to Interrogatory 1 of AGC Chemicals Americas, Inc.'s First Set of Interrogatories); Ex. 18 (Plaintiff's Revised Responses and Objections to Interrogatory 7 of Daikin America, Inc.'s First Set of Interrogatories); Ex. 19 (Plaintiff's Revised Responses

- and Objections to Interrogatory 7 of Solvay Specialty Polymers USA, LLC's First Set of Interrogatories).
- Hardwick no longer asks for damages, cognizable medical-monitoring relief, or indeed any kind of binding relief; now all he wants is "a group" to study "what the effects are on my body," and if that group finds no effects, he does not want to be bound by their determination. Dep. 133:7–10, 135:10–137:4.

Hardwick, in short, no longer meets his burden to establish standing—on any of the three prongs.

1. On injury in fact, Hardwick admits he is suing over "an unquantified or unknown risk of possible future injury from [PFAS]"—which is not enough to establish standing. *Schoelwer v. Omega Flex, Inc.*, No. 1:14-cv-360, 2014 WL 7185295, at *8 (S.D. Ohio Dec. 16, 2014). Specifically, he admits that he does not "know what these chemicals can potentially do," Dep. 136:17–19, so he brought this suit to "learn" whether he is at any risk—not because he claims to be at an increased risk, but because he "want[s] to know [his] risk." Dep. 133:21. Through this lawsuit, therefore, he is "trying to gather the information required *to see what the risk is*" and "what the effects are." *Id.* at 128:1–4, 133:7–10 (emphasis added). By Hardwick's own sworn testimony, this suit is thus "to satisfy [his] curiosity and fear," *id.* at 133:17–134:1, not to get monitoring for a disease that he was told or even believes he is at an increased risk of developing.

A plaintiff cannot sue to resolve his "[f]ear" that an injury might happen in the future. *See Shelby Advocates for Valid Elections v. Hargett*, 947 F.3d 977, 981 (6th Cir. 2020); *Schoelwer*, 2014 WL 7185295, at *8 (same is true for claims seeking medical monitoring). For injury in fact in this kind of case, the plaintiff must at least show a "substantial risk" of future diseases or illness (and even that the Sixth Circuit has suggested may no longer be enough). *Shelby*, 947 F.3d at 982; *see Clapper v. Amnesty Int'l USA*, 568 U.S. 398, 409 (2013); *Schoelwer*, 2014 WL 7185295, at

*8. Hardwick's admissions that he has no evidence of such an increased risk of injury foreclose that showing—and thus close the courthouse doors to his claims.

Hardwick's admissions also show that he is "asserting an abstract general interest common to all members of the public," which is not enough for injury in fact "no matter how sincere or deeply committed [the] plaintiff is to vindicating that general interest on behalf of the public." *Carney v. Adams*, __ U.S. __, 2020 WL 7250101, at *4 (U.S. Dec. 10, 2020) (internal quotation marks omitted). Quite literally, Hardwick asserts an interest allegedly shared by 330 million Americans: to learn about the effects from PFAS. He has to assert—and now have proof of—far more, at least by offering evidence that he himself is at a substantial risk of developing future diseases or illness because of PFAS. When he testified under oath, Hardwick did the opposite.

Hardwick may argue that his past exposure to PFAS in and of itself injured him so that he can bring this case. But that would be wrong in this *prospective-relief-only* case. "Past exposure" (here, to PFAS) does not allow a plaintiff to receive any prospective relief "if unaccompanied by any continuing, present adverse effects" (here, evidence or even a claim of a substantially increased risk of developing injury from the PFAS). *O'Shea*, 414 U.S. at 495–96; *see*, *e.g.*, *Hearring v. Sliwowski*, 806 F.3d 864, 868 (6th Cir. 2015). This Court recognized as much in its motion-to-dismiss decision, rightly basing its injury-in-fact holding only on Hardwick's allegedly *present* "increased risk of disease." MTD Op. 16. Now that Hardwick has abandoned that theory with his admissions, there can be no injury in fact sufficient to maintain this exclusively forward-looking case. *See also* ECF No. 105 (Defendants' Joint Reply Br.) at 4–7.

2. Nor, at any rate, can Hardwick establish traceability. At this stage of the case, Hardwick must, with evidence, trace his claim of injury to particular defendants. *Allen v. Wright*, 468 U.S. 737, 758 (1984). But Hardwick openly admits that it is entirely speculative—that he has "no idea,"

e.g., Dep. 68:25, 69:15–19, 71:10—whether PFAS entered his blood from any particular defendant in any particular way. He has therefore not met his burden on traceability.

Likewise defeating traceability is Hardwick's inability to exclude the possibility that the "independent role of third-party actors" not before the court may have caused his alleged injury. United States v. Carroll, 667 F.3d 742, 745 (6th Cir. 2012); see Dep. 232:3–233:23. On this point, far from excluding that possibility, Hardwick again openly admits that others were involved. This admission was wise, given the evidence in the case—including from Dr. Reitman, who explains that there are a multitude of non-parties that made, sold, used, and released, and were otherwise connected to, PFAS and PFAS-containing products. See Reitman Rep. 9-13. To take just one example of possibly hundreds, Hardwick used AFFF once a week during his time with the Cincinnati/Kentucky airport (Dep. 211:23–212:4)—it was "flowing foam on a regular basis," Ex. 20, KH 000077—and yet Hardwick has not named as defendants many companies that manufacture the AFFF he was covered with (Dep. 232:3–233:23). The same is true of Hardwick's use of firefighter gear: He used it but did not sue the manufacturers he identified as the ones providing his gear. Dep. 73:10–75:1. Traceability therefore is absent twice over, once because Hardwick has "no idea" whether the named Defendants caused his alleged injury, and again because there are many others not before the Court that undoubtedly contributed to it.

3. Redressability is also lacking. At the motion-to-dismiss stage, this Court spent several pages discussing how the Complaint could be read as seeking "damages and medical monitoring" (with perhaps the additional "oversight of further scientific study"), which would satisfy redressability. MTD Op. 17–21; *see Sutton v. St. Jude Med. S.C., Inc.*, 419 F.3d 568, 575 (6th Cir. 2005).

But all that is out the window. Asked what relief he is seeking in this case, Hardwick disclaimed seeking damages and made no mention of medical monitoring. Dep. 133:5–134:11. That makes sense, too, because

All Hardwick wants now is a science panel so he can learn about PFAS—"a group," in Hardwick's words, "to determine what the effects are on my body," if there are any. Dep. 133:7–10, 137:3–4. To put it starkly (as Hardwick did at his deposition), his requested relief is "knowledge," and "[a]part from knowledge," there is "[no]thing else" that he "expect[s] to get from this lawsuit." *Id.* at 134:6–11.

Unlike a damages or medical-monitoring case, a case to obtain "the relief in knowing," as Hardwick puts it, *id.* at 133:7, is no Article III "Case" at all. The "psychic satisfaction" in gathering knowledge on an issue "is not an acceptable Article III remedy because it does not redress a cognizable Article III injury." *Steel Co. v. Citizens for a Better Env't*, 523 U.S. 83, 107 (1998) (citation omitted). It may help quell Hardwick's "fear" or quench his "curiosity," Dep. 133:17–134:1, but it does not satisfy Article III's redressability requirement, for it does nothing to remedy any increased risk of disease (assuming one existed)—the only possibly cognizable injury in fact here. *See Clapper*, 568 U.S. at 416; *Kardules v. City of Columbus*, 95 F.3d 1335, 1355 (6th Cir. 1996).

Hardwick's desire for a *non-binding* resolution doubles the problem. A plaintiff separately fails redressability when "resolution" of his case "would not [be] binding" on him—when, that is, he would not "be obliged to honor [a] legal determination the suit produced." *See Lujan*, 504 U.S.

at 569; North Carolina v. Rice, 404 U.S. 244, 246 (1971) (per curiam); Lewis v. Governor of Alabama, 944 F.3d 1287, 1302 (11th Cir. 2019) (en banc). That is the case here according to Hardwick himself. If the science panel finds against him, Hardwick will not "accept that science panel's finding[s] to preclude [him] from suing a PFAS manufacturer" in the future "for [an] illness" that might, in theory, arise sometime later on. E.g., Dep. 135:20–137:4, 140:3–8. This is also what Hardwick's lawyers said in their motion-to-dismiss opposition brief: that the science "panel would provide the Court with advice and assistance" and "with reports and recommendations" only, not with any binding determinations. ECF No. 94 at 23. Because Hardwick openly seeks a "non-binding judgment[]," his "claim is not redressable and th[e] court lacks jurisdiction over it." Leu v. Int'l Boundary Comm'n, 605 F.3d 693, 695 (9th Cir. 2010) (citation omitted); see McClure v. Ashcroft, 335 F.3d 404, 410 (5th Cir. 2003). His requested science-panel relief will not be "a decree of a conclusive character"—here, "immediate[ly] and definitive[ly] determin[ing]" that Defendants are, or are not, liable to Hardwick and the class. See Aetna Life Ins. Co. of Hartford, Conn. v. Haworth, 300 U.S. 227, 241 (1937) (citation omitted). Instead, at the end of this massive proceeding, Hardwick would get nothing more than some information, not binding on him, that he could then use in a future case if he decides to bring one. That is a "ghost[] that slay[s]" if there ever was one. Felix Frankfurter, A Note on Advisory Opinions, 37 Harv. L. Rev. 1002, 1008 (1924).

It does not matter, either, that Hardwick could possibly use the knowledge he gains in this proceeding to obtain real relief in a future case (*e.g.*, to get money damages or medical monitoring later on, in a later suit). *See United States v. Asakevich*, 810 F.3d 418, 420 (6th Cir. 2016). A federal court has no power to entertain *this proceeding* if it does not seek an "acceptable Article III remedy." *Steel Co.*, 523 U.S. at 107. And Hardwick's knowledge-seeking, science-panel suit

does not. It is, instead, a kind of administrative or legislative inquiry, not a "Case" that a federal court may entertain under Article III.

Hardwick may counter that obtaining research on PFAS could solve some problems, indeed some really important ones. But "[t]he federal courts are not free-range problem solvers," and they cannot order relief in the abstract even when it might help improve a situation. *Hearring*, 806 F.3d at 868. As the Supreme Court summarized last week, it is not "for courts to pass upon abstract, intellectual problems," even when they are important. *Carney*, 2020 WL 7250101, at *4 (cleaned up). They can order relief only when it will directly and personally remedy the plaintiff's cognizable injury in fact. And Hardwick's science panel—instituted to give him the "relief in knowing" what the "possible effects are on [his] body," Dep. 133:7–10—does not fit the bill.

At bottom, now that the Court must consider the record rather than just the pleadings, Hardwick has failed to carry his burden of establishing standing. This class thus cannot be certified.

B. Certification Would Violate Article III Because the Proposed Class Contains Numerous Uninjured Parties.

Just as the only named Plaintiff's lack of standing defeats class certification, so does a class that is defined to include significant numbers of members who lack standing. *See Colley v. Procter & Gamble Co.*, No. 1:16-CV-918, 2016 WL 5791658, *8 (S.D. Ohio Oct. 4, 2016) (citing *Amchem*, 521 U.S. at 613); *Loreto v. Procter & Gamble Co.*, No. 1:09-CV-815, 2013 WL 6055401, at *4 (S.D. Ohio Nov. 15, 2013).

That describes this putative class, which encompasses *millions* of people who have suffered no harm or injury under any conceivable standard. Millions of would-be class members, like Hardwick, will have no illness or disease they or any expert (or even the proposed science panel) might even possibly attribute to their PFAS exposures. And because of the breathtakingly broad class definition—to repeat, having a not-even-detectable level of PFOA plus any other kind of

PFAS—millions of class members would not even be at any risk (far less a significant one) of developing any disease. Hardwick provides no expert or other support to the contrary.⁸²

Courts confronting PFAS classes not even approaching the overbreadth of this one have denied certification because of the lack of support that any member of the class—let alone all of them—had been exposed to PFAS at a level of medical significance. Take *Rowe v. E.I. duPont de Nemours & Co.*, No. CIV. 06-1810 (RMB), 2008 WL 5412912 (D.N.J. Dec. 23, 2008), for example. The court there rejected the PFOA-based class because the *Rowe* plaintiffs, like Hardwick here, failed to provide any basis for concluding that class members have had significant exposure to a substance that puts them at a significant increased risk of contracting a serious illness. "A class action," after all, "is not intended to be an easy way around research problems." *Id.* at *14. Neither is it here.

All of this, moreover, assumes that the relevant state law authorizes a claim without a present illness or disease. But many States do not. Take Kentucky, where Hardwick spent a large portion of his professional firefighting career, which does not allow for medical monitoring in the absence of an identifiable present physical injury. *See, e.g., Wood v. Wyeth-Ayerst Labs.*, 82 S.W.3d 849, 859 (Ky. 2002); *Henry v. Dow Chem. Co.*, 701 N.W.2d 684 (Mich. 2005); *Hinton v. Monsanto Co.*, 813 So. 2d 827 (Ala. 2001); *Lowe v. Philip Morris, Inc.*, 183 N.W.2d 181 (Ore. 2008). In these States, class members with no present illness would have no cognizable injury,

Acid (PFOA) Exposures and Incident Cancers among Adults Living Near a Chemical Plant, Envt'l Health Perspectives, at 1314, 1316 (Nov.–Dec. 2013).

The C8 Health Project, which Hardwick references repeatedly, is of no assistance to him. The subjects who elected to participate had a *median* PFOA blood serum level of 28 ng/mL (ppb)—

60,000 times more than the level Hardwick would require for putative class membership. See Barry, V., et al., Perfluorooctanoic

which only compounds the uninjured-class-member problem. That problem alone erects an independent constitutional barrier to certification.

C. Certifying this Class Would Violate Defendants' and Absent Class Members' Seventh Amendment Rights.

Nor can the Court certify this class without running afoul of the Seventh Amendment (assuming the Court ignores Hardwick's admission that he seeks non-binding relief). *See Feltner v. Columbia Pictures TV, Inc.*, 523 U.S. 340, 355 (1998). The Complaint purports to demand a jury, but explicitly asks for the science panel, not the jury, to determine general causation (*i.e.*, "a causal connection between any single or combination of PFAS in human blood and any injury," Am. Compl. ¶ 75). This motion doubles down on this request. Mem. 49–50. If that requested relief is binding, as it must be to satisfy redressability, then it violates the Seventh Amendment by delegating the question of general causation to a science panel.⁸³

This Court demurred on this issue at the motion-to-dismiss stage, but it must decide it now. Before certifying a class, courts must "carefully scrutinize[]" the proposed class to protect putative class members' Seventh Amendment rights. *Coleman v. Gen. Motors Acceptance Corp.*, 296 F.3d 443, 448 (6th Cir. 2002) (quotation omitted); *see Ortiz v. Fibreboard Corp.*, 527 U.S. 815, 845–46 (1999). This proposed class does not pass any level of scrutiny. It includes people who will want to bring—and perhaps even those who have already brought (see above at p. 66)—claims for money damages, claims for medical monitoring, claims for property damage, class actions and other claims all dependent on proving causation, but who could be precluded from doing so by the Science Panel's findings. As for any disease found by the Science Panel not to be caused by

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⁸³ Any binding Science Panel would also take the case away from the Court, in violation of due process and the Federal Rules of Civil Procedure, as Defendants argued in the joint motion to dismiss.

exposure to a certain level or particular type of PFAS, any sufferers of those diseases now or in the future would thereafter be forever precluded from suing—and will thus be deprived of their constitutionally protected jury rights. *See RoundUp*, 2020 WL 3723305, at *2. And this class includes relief that strips Defendants of their jury rights, by delegating to the Science Panel the ability to make binding findings on general causation. This Court cannot allow that.

D. Certifying this Class Would Violate Absent Class Members' and Defendants' Due Process Rights.

This proposed class also violates constitutional due process in at least two ways: *First*, without any notice, it would bind putative class members involved in other litigation to the findings of this litigation (assuming the relief were binding, contrary to what Hardwick requests); and *second*, it would result in this Court asserting personal jurisdiction over state common-law claims of persons who live outside Ohio and who cannot demonstrate that their claims arise out of particular Defendants' contacts with this State.

1. Putative class members' due-process rights. Because Rule 23(b)(2) affords no notice or opt-out procedures, certification "create[s] the possibility . . . that individual class members' compensatory-damages claims would be precluded by litigation they had no power to hold themselves apart from." Dukes, 564 U.S. at 364. Once a court has certified a class, any judgment entered in the action binds all members of that class. See, e.g., Hansberry v. Lee, 311 U.S. 32, 40 (1940). This class, if certified, would therefore bind the unnamed class members—all 330 million of them—to the findings in this case, without any notice or ability to opt out.

That is the case for any mandatory (non-opt-out) class, which is why courts must carefully guard against certifying an overbroad mandatory class—one that, for example, includes class members who have money-damages claims against the defendants arising from the same transaction or occurrence as the class claims. *See Ortiz*, 527 U.S. at 846–47. This proposed class

Defendants about these same issues (see above at p. 66), and it certainly includes those who would want to do so in the future. If the factfinder here finds a lack of general causation, or an insufficient risk to warrant testing and monitoring for certain chemicals and exposure levels, those findings would bind all class members, depriving them of their rights to be heard and to present evidence and expert testimony in their other cases—and of their ability to assert claims in other pending litigation or later actions. *See Taylor v. Sturgell*, 553 U.S. 880, 892 (2008) (issue preclusion); *New Hampshire v. Maine*, 532 U.S. 742, 748 (2001) (claim preclusion). This class would, that is, without notice to anyone, deprive all class members of their "own day in court." *Ortiz*, 527 U.S. at 846. It is unconstitutional to do this to plaintiffs in other litigation or those who might want to bring other litigation for damages (or who already have) but may end up being precluded by the findings of this litigation. And it is unconstitutional to resurrect claims already decided whether by litigation or settlement (if that is what Hardwick tries to do).

2. Defendants' due process rights. Certifying the class would violate Defendants' constitutional due-process rights under Bristol-Myers Squibb Co. v. Superior Ct., 137 S. Ct. 1773 (2017). Under the standard outlined there, due process does not allow this Court to assert personal jurisdiction over the state common-law claims of persons who live outside Ohio and whose claims do not arise out of any particular Defendants' contacts with the state. See id. at 1781. That describes the overwhelming majority of would-be class members here—97 percent of the putative class, going off of census data. If Bristol-Myers applies, therefore, this class cannot be certified.

Hardwick argues that *Bristol-Myers* does not apply to class claims. But a number of courts have already rejected that argument, holding instead that *Bristol-Myers* prohibits nationwide class actions when, as here, the defendants are not subject to general jurisdiction in the forum and the

putative class members' claims do not arise out of the particular defendant's contacts with the State where the class action is brought. *See, e.g., In re Dicamba Herbicides Litig.*, No. MDL 2820, 2019 WL 460500, at *6 (E.D. Mo. Feb. 6, 2019) (collecting cases); *Maclin v. Reliable Reports of Texas, Inc.*, 314 F. Supp. 3d 845, 851 (N.D. Ohio 2018); *cf. Kondash v. Kia Motors Am., Inc.*, No. 1:15-CV-506, 2016 WL 11246421, at *6 (S.D. Ohio June 24, 2016) (dismissing non-Ohio plaintiffs' claims because claims did not arise out of or relate to defendants' activities in Ohio). That is the correct reading of *Bristol-Myers*. Allowing the claims of non-resident absent class members to proceed is inconsistent with *Bristol-Myers* and would lead to gamesmanship and artful pleading in an effort to circumvent defendants' due process rights. Under that approach, plaintiffs could avoid *Bristol-Myers* simply by naming as the only plaintiff an in-state class representative whose claims purportedly arise out of the defendant's contacts with the state, and calling all non-residents a class rather than naming them individually. Indeed, that is exactly what Hardwick seeks to do here. This Court should not allow it.

Defendants recognize that the Seventh Circuit has held that *Bristol-Myers* only applies to named plaintiffs in class actions, *Mussat v. IQIVA, Inc.*, 953 F.3d 441 (7th Cir. 2020), but the Sixth Circuit has not decided the issue. Defendants also recognize that this Court recently has held that the Supreme Court's decision in *Bristol-Myers* does not apply to unnamed class members, *Wiggins v. Bank of Am.*, -- F. Supp. 3d. -- , No. 2:19-CV-3223, 2020 WL 5642422 (S.D. Ohio Sept. 22, 2020); *Progressive Health & Rehab Corp. v. Medcare Staffing, Inc.*, No. 2:19-CV-4710, 2020 WL 3050185 (S.D. Ohio June 8, 2020), but this Court correctly decided that *Bristol-Myers* mandates dismissal of claims by non-resident putative class representatives who could not, themselves, establish personal jurisdiction over the defendants, *Wiggins*, 2020 WL 5642422. This Court here should side with the courts that have refused to artificially limit *Bristol-Myers*. Defendants'

constitutional due process rights cannot turn on whether claims are asserted directly by non-resident class representatives or indirectly by resident class representatives.

CONCLUSION

For these reasons, this Court should deny Plaintiff's motion for class certification.

Dated: December 14, 2020 Respectfully submitted,

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APPENDICES

Defendants' Appendix A Variation in Medical Monitoring Law*

	Harm Required	Exposure Required	Need Required	Benefit Required	Other Requirements	Cause of Action	Highest Court
Alabama	"present injury or illness."	N/A	N/A	N/A	N/A	N/A	Yes. ²
Alaska	Unclear. ³	N/A	N/A	N/A	N/A	N/A	No.
Arizona	"reliable expert testimony" showing the "the toxicity ^[4] of [the contaminant], the seriousness of the diseases for which the individuals are at risk, [and] the relative increase in the chance of onset of the disease in those exposed." ⁵	"reliable expert testimony" showing the "significance and extent of exposure."	"plaintiffs should be entitled to such regular medical testing and evaluation as is reasonably necessary and consistent with contemporary scientific principles applied by physicians experienced in the diagnosis and treatment of these types of injuries." "surveillance to monitor the effects of exposure to toxic chemicals [must be] reasonable and necessary." "8	"reliable expert testimony" showing "the value of early diagnosis."9	"reliable expert testimony." Successful plaintiffs are entitled to a "court-supervised fund" rather than a "lump sum award." 11	Unclear. ¹²	No.
Arkansas	Manifest physical injury. ¹³	N/A	N/A	N/A	N/A	N/A	No.

^{*} The analysis of state law in this document is preliminary and illustrative and should not be understood to represent the positions that Defendants will take on state law questions in this or any other case based a complete analysis of state law and the facts of particular claims.

	Harm Required	Exposure Required	Need Required	Benefit Required	Other Requirements	Cause of Action	Highest Court
California	The court should consider "the toxicity of the chemicals , the relative increase in the chance of onset of disease in the exposed plaintiff as a result of the exposure, when compared to (a) the plaintiff's chances of developing the disease had he or she not been exposed, and (b) the chances of the members of the public at large of developing the disease; [and] the seriousness of the disease for which the plaintiff is at risk." 14	The court should consider "the significance and extent of the plaintiff's exposure to chemicals." 15	"reliable medical expert testimony" must show "that the need for future monitoring is a reasonably certain consequence of a plaintiff's toxic exposure." [R] eliable medical expert testimony" must show "that the recommended monitoring is reasonable." 17 "toxic exposure plaintiffs may recover 'only if the evidence establishes the necessity, as a direct consequence of the exposure in issue, for specific monitoring beyond that which an individual should pursue as a matter of general good sense and foresight." 18	The court should consider "the clinical value of early detection and diagnosis." 19	"reliable medical expert testimony." ²⁰ Favoring "courtsupervised funds to pay medical monitoring claims as they accrue, rather than the award of a lump-sum verdict." ²¹	No. ²²	Yes. ²³
Colorado	"plaintiff suffers from an increased risk of contracting a serious latent disease." ²⁴	"significant exposure to a hazardous substance through the tortious actions of the defendant." ²⁵	"increased risk makes periodic diagnostic medical examinations reasonably necessary." ²⁶	"monitoring and testing procedures exist which make the early detection and treatment of the disease possible and beneficial." ²⁷	"tortious actions of the defendant." ²⁸	Yes. ²⁹	No.
Connecticut	Undecided. ³⁰	N/A	N/A	N/A	N/A	N/A	Yes. ³¹

	Harm Required	Exposure Required	Need Required	Benefit Required	Other Requirements	Cause of Action	Highest Court
Delaware	Undecided. ³²	N/A	N/A	N/A	N/A	N/A	No.
Florida	"as a proximate result of the exposure, plaintiff has a significantly increased risk of contracting a serious latent disease." 33	"exposure greater than normal background levels [] to a proven hazardous substance." ³⁴	"the prescribed monitoring regime is reasonably necessary according to contemporary scientific principles." "the prescribed monitoring regime is different from that normally recommended in the absence of the exposure." "36	"a monitoring procedure exists that makes the early detection of the disease possible." 37	Defendant's negligence. ³⁸ "fund for the purpose of monitoring the condition of plaintiffs" encouraged rather than a "lump-sum award." ³⁹	Yes. ⁴⁰	No.
Georgia	Probably present physical injury. ⁴¹	N/A	N/A	N/A	N/A	N/A	No.
Hawaii	Probably present physical injury; "objectively verifiable functional impairment." ⁴²	N/A	N/A	N/A	N/A	N/A	No.
Idaho	Unclear. ⁴³	N/A	N/A	N/A	N/A	N/A	No.
Illinois	"actual or realized harm." ⁴⁴	N/A	N/A	N/A	N/A	N/A	Yes. ⁴⁵
Indiana	Unclear.46	N/A	N/A	N/A	N/A	N/A	No.
Iowa	Probably "actual injury." ⁴⁷	N/A	N/A	N/A	N/A	N/A	No.
Kansas	Unclear. ⁴⁸	N/A	N/A	N/A	N/A	N/A	No.
Kentucky	"present physical injury." ⁴⁹	N/A	N/A	N/A	N/A	N/A	Yes. ⁵⁰

	Harm Required	Exposure Required	Need Required	Benefit Required	Other Requirements	Cause of Action	Highest Court
Louisiana	"manifest physical or mental injury or disease." ⁵¹	N/A	N/A	N/A	N/A	N/A	Yes. ⁵²
Maine	Unclear. ⁵³	N/A	N/A	N/A	N/A	N/A	No.
Maryland	"reasonably certain and significant increased risk of developing a latent disease as a result of exposure to a toxic substance."54 Plaintiff "must present expert testimony quantifying his or her risk of developing a latent disease."55	"court must consider whether the plaintiff has shown that the plaintiff was significantly exposed to a proven hazardous substance through the defendant's tortious conduct." 56	"court must consider whether the plaintiff has shown that increased risk makes periodic diagnostic medical examinations reasonably necessary." 57	"court must consider whether the plaintiff has shown that monitoring and testing procedures exist which make the early detection and treatment of the disease possible and beneficial."58	"defendant's tortious conduct." ⁵⁹ "the court should award medical monitoring costs ordinarily by establishing equitably a fund, administered by a trustee, at the expense of the defendant." ⁶⁰	No. ⁶¹	Yes. ⁶²

	Harm Required	Exposure Required	Need Required	Benefit Required	Other Requirements	Cause of Action	Highest Court
Massachusetts	"the plaintiff bec[a]me exposed to a hazardous substance that produced, at least, subcellular changes that substantially increased the risk of serious disease, illness, or injury."63 "No particular level or quantification of increase in risk of harm is necessary, so long as it is substantial and so long as there has been at least a corresponding subcellular change."64	"the plaintiff bec[a]me exposed to a hazardous substance."65	"diagnostic medical examinations are reasonably (and periodically) necessary, conformably with the standard of care."66	"an effective medical test for reliable early detection exists" and "early detection, combined with prompt and effective treatment, will significantly decrease the risk of death or the severity of the disease, illness or injury."67	Defendant's negligence. 68 "The present value of the reasonable cost of such tests and care, as of the date of the filing of the complaint." 69 "the lump sum may be ordered paid into an appropriate account If they are not used, the award may be returned to the defendant who was obligated to make such payment." 70	Yes. ⁷¹	Yes. ⁷²
Michigan	"present physical injury." ⁷³	N/A	N/A	N/A	N/A	N/A	Yes. ⁷⁴
Minnesota	"subcellular injury." ⁷⁵	N/A	N/A	N/A	N/A	N/A	No.
Mississippi	"present manifest injury." ⁷⁶	N/A	N/A	N/A	N/A	N/A	Yes. ⁷⁷

	Harm Required	Exposure Required	Need Required	Benefit Required	Other Requirements	Cause of Action	Highest Court
Missouri	"significantly increased risk of contracting a particular disease relative to what would be the case in the absence of exposure." 78	"exposure to toxic substances."	"medical monitoring is, to a reasonable degree of medical certainty, necessary in order to diagnose properly the warning signs of disease." 80	N/A	Medical monitoring is a "compensable item of damage when liability is established under traditional tort theories of recovery."81	No. ⁸²	Yes. ⁸³
Montana	"as a proximate result of the exposure, plaintiff has a significantly increased risk of contracting a serious latent disease."84	"exposure greater than normal background levels to a proven hazardous substance."85	"the prescribed monitoring regime is reasonably necessary according to contemporary scientific principles." 86 "the prescribed monitoring regime is different from that normally recommended in the absence of exposure." 87	"monitoring procedure exists that makes the early detection of the disease possible"88	"defendant's negligence."89 Court encourages "setting up and administering a medical monitoring fund."90	Yes. ⁹¹	No.
Nebraska	"present physical injury."92	N/A	N/A	N/A	N/A	N/A	No.
Nevada	"reasonably required to undergo medical monitoring beyond what would have been recommended had the plaintiff not been exposed to the negligent act of the defendant."93	Unclear. ⁹⁴	"medical monitoring at issue is something greater than would be recommended as a matter of general health care for the public at large." 95	N/A	N/A	No. ⁹⁶	Yes. ⁹⁷

	Harm Required	Exposure Required	Need Required	Benefit Required	Other Requirements	Cause of Action	Highest Court
New Hampshire	"as a proximate result of the exposure, plaintiff has suffered an increased risk of contracting a serious latent disease."98	"he or she has, relative to the general population, been significantly exposed to a proven hazardous substance."99	"the increased risk of disease makes it reasonably necessary for the plaintiff to undergo periodic diagnostic medical examinations different from what would be prescribed in the absence of the exposure." 100	"monitoring procedures exist that make the early detection of a disease possible ." ¹⁰¹	"tortious conduct of the defendant." 102	Yes. ¹⁰³	No.
New Jersey	Physical injury required under the New Jersey Product Liability Act. 104 Under New Jersey Tort Claims Act, a plaintiff must "demonstrate, through reliable expert testimony predicated upon the significance and extent of exposure to chemicals, the toxicity of the chemicals, the seriousness of the diseases for which individuals are at risk, the relative increase in the chance of onset of disease in those exposed." 105	N/A	Under New Jersey Tort Claims Act, plaintiff must "demonstrate, through reliable expert testimony predicated upon the significance and extent of exposure to chemicals that such surveillance to monitor the effect of exposure to toxic chemicals is reasonable and necessary." 106	Under New Jersey Tort Claims Act, plaintiff must "demonstrate, through reliable expert testimony predicated upon the significance and extent of exposure to chemicals the value of early diagnosis." 107	Under New Jersey Tort Claims Act, plaintiff must provide "reliable expert testimony." 108 "the use of a court-supervised fund to administer medical- surveillance payments in mass exposure cases is [] highly appropriate." 109	No. ¹¹⁰	Yes. ¹¹¹
New Mexico	Unclear. ¹¹²	N/A	N/A	N/A	N/A	N/A	No.

	Harm Required	Exposure Required	Need Required	Benefit Required	Other Requirements	Cause of Action	Highest Court
New York	"allegations of the physical manifestation of or clinically demonstrable presence of toxins in the plaintiffs body are sufficient to ground a claim for personal injury and that for such a claim, if proven, the plaintiff may be awarded, as consequential damages for such injury, the costs of medical monitoring." 113	N/A	N/A	N/A	N/A	No. ¹¹⁴	Yes, in part. 115
North Carolina	"recognized present injury." 116	N/A	N/A	N/A	N/A	N/A	No.
North Dakota	"legally cognizable injury" that is "present." ¹¹⁷	N/A	N/A	N/A	N/A	N/A	No.

	Harm Required	Exposure Required	Need Required	Benefit Required	Other Requirements	Cause of Action	Highest Court
Ohio	"increased risk of—and corresponding cost of screening for—certain diseases that are more likely to occur as a result of" a defendant's tortious conduct." The risk must be "legally significant."	"the mere existence of a toxin in the environment is insufficient to establish causation without proof that the level of exposure could cause the plaintiff's symptoms, the symptom being, in this case, a substantially 'increased risk' of contracting a number of serious diseases." 120	"plaintiffs must offer 'evidence that a reasonable physician would order medical monitoring for them." "121" "monitoring must be directed toward the disease for which the tort victim is at risk, and will only include procedures which are medically prudent in light of that risk as opposed to measures aimed at general health." 122	Doctor must have an "idea which disease he would be screening for or treating." 123	"individualized exposure data." ¹²⁴ "defendant's tortious conduct." ¹²⁵	No. ¹²⁶	No.
Oklahoma	"existing disease or physical injury." ¹²⁷	N/A	N/A	N/A	N/A	N/A	No.
Oregon	"present physical injury." 128	N/A	N/A	N/A	N/A	N/A	Yes. ¹²⁹
Pennsylvania	"as a proximate result of the exposure, plaintiff has a significantly increased risk of contracting a serious latent disease." 130	"exposure greater than normal background levels to a proven hazardous substance." 131	"the prescribed monitoring regime is reasonably necessary according to contemporary scientific principles" and "the prescribed monitoring regime is different from that normally recommended in the absence of the exposure." 132	"a monitoring procedure exists that makes the early detection of the disease possible." 133	"defendant's negligence" and expert testimony. 134 "a medical monitoring trust fund is a more appropriate remedy than lump sum damages in mass exposure toxic tort cases." 135	Yes. ¹³⁶	Yes. 137

	Harm Required	Exposure Required	Need Required	Benefit Required	Other Requirements	Cause of Action	Highest Court
Rhode Island	"Present harm." 138	N/A	N/A	N/A	N/A	N/A	No.
South Carolina	Manifest physical injury. 139	N/A	N/A	N/A	N/A	N/A	No.
South Dakota	Unclear. ¹⁴⁰	N/A	N/A	N/A	N/A	N/A	No.
Tennessee	Unclear ("murky" ¹⁴¹)	N/A	N/A	N/A	N/A	N/A	No.
Texas	"present physical injury." 142	N/A	N/A	N/A	N/A	N/A	No.

increase his or her risk of the anticipated harm significantly over the plaintiff's risk prior to exposure. No particular level of quantification is necessary to satisfy this requirement of significantly increased risk." 144 prove that the illness, the risk of which has been increased by exposure to the toxin, is a serious one an illness that in its ordinary course may result in significant impairment or 1 plaintiff must in its off the interval in significant impairment or 1 plaintiff must in its of the defendant is monitoring costs found to be reasonable and monitoring costs found to be reasonable and monitoring costs found to be reasonable and necessary will be compensable. "150 Plaintiff must "prove that the course of the illness." 154 "it is not enough that early detection and treatment are shown to be theoretically beneficial. It also must be shown that administration of the test to a specific plaintiff is medically advisable for that plaintiff." 155 plaintiff must provided to the plaintiff must provided to the plaintiff." 155 prove that a test exists stored in the lilness, that in its ordinary course may result in significant impairment or 1 plaintiff must provided to the plaintiff." 159	Utah	"increased risk of a serious disease, illness, or injury." ¹⁴³ "plaintiff must prove that the exposure was of sufficient intensity	"exposure to a toxic substance." 147 "Exposure" means "ingesting, inhaling, injecting, or otherwise absorbing	"test has been prescribed by a qualified physician according to contemporary scientific principles." 149	"a medical test for early detection exists ." ¹⁵³ "early detection [must be] beneficial , meaning that a	Defendant's negligence. 158 "Although we do not mandate a trust fund, leaving it to the trial court to	Yes. ¹⁶⁰	Yes. ¹⁶¹
"We therefore require not only that a doctor prescribe the test for substance to which he or she was exposed is 'toxic' 'a substance that through its chemical action usually kills, injures, "We therefore require not only that a doctor prescribe the test for this plaintiff, but also that the test is shown by expert testimony to be one a reasonable physician in the area of specialty would monitoring would be outweighed by the costs, which may include, among other things, the burdensome frequency of the monitoring procedure, its excessive price, or its risk of harm to the		and/or duration to increase his or her risk of the anticipated harm significantly over the plaintiff's risk prior to exposure. No particular level of quantification is necessary to satisfy this requirement of significantly increased risk." the plaintiff must prove that the illness, the risk of which has been increased by exposure to the toxin, is a serious one an illness that in its ordinary course may result in significant impairment or death." the plaintiff must prove that the substance to which he or she was exposed is 'toxic' 'a substance that through its chemical action	the substance in question into the	monitoring costs found to be reasonable and necessary will be compensable."150 Plaintiff must "prove that by reason of the exposure to the toxic substance caused by the defendant's negligence, a reasonable physician would prescribe for her or him a monitoring regime different than the one that would have been prescribed in the absence of that particular exposure."151 "We therefore require not only that a doctor prescribe the test for this plaintiff, but also that the test is shown by expert testimony to be one a reasonable physician in the area	treatment exists that can alter the course of the illness."154 "it is not enough that early detection and treatment are shown to be theoretically beneficial. It also must be shown that administration of the test to a specific plaintiff is medically advisable for that plaintiff."155 "the plaintiff must prove that a test exists for detecting the onset of the illness before it would be apparent to the layperson."156 Consider whether "the benefits of the monitoring would be outweighed by the costs, which may include, among other things, the burdensome frequency of the monitoring procedure, its excessive price, or	trial court to fashion a suitable equitable remedy, we do hold that any award must provide for the defendant's payment of only the costs of the medical monitoring services that will actually be provided to the		

	Harm Required	Exposure Required	Need Required	Benefit Required	Other Requirements	Cause of Action	Highest Court
	organism.' We note that the substance must be toxic to humans rather than to other forms of life." 146		similarly situated, i.e., facing a similar risk of the same serious illness from the same cause." ¹⁵²				
Vermont	"As a proximate result of the exposure, plaintiffs have suffered an increased risk of contracting a serious disease ." 162	"Exposure at a rate significantly greater than the general population [t]o a proven hazardous substance." 163	"The increased risk makes it medically necessary for the plaintiffs to undergo periodic medical examination different from that prescribed for the general population in the absence of the exposure." 164	"Monitoring procedures exist which are reasonable in cost and safe for use ." 165	"tortious conduct of the defendant." 166	No. ¹⁶⁷	No.
Virginia	"present, physical injury." 168	N/A	N/A	N/A	N/A	N/A	No.
Washington	Probably "present, existing injury." 169	N/A	N/A	N/A	N/A	N/A	No.

	Harm Required	Exposure Required	Need Required	Benefit Required	Other Requirements	Cause of Action	Highest Court
West Virginia	"as a proximate result of the exposure, plaintiff has suffered an increased risk of contracting a serious latent disease." 170	"he or she has, relative to the general population, been significantly exposed to a proven hazardous substance." 171	"the increased risk of disease makes it reasonably necessary for the plaintiff to undergo periodic diagnostic medical examinations different from what would be prescribed in the absence of the exposure." a determination [can be] based, at least in part, upon the subjective desires of a plaintiff for information concerning the state of his or her health." 173	"monitoring procedures exist that make the early detection of a disease possible." 174 "a plaintiff should not be required to show that a treatment currently exists for the disease that is the subject of medical monitoring." 175 "factors such as financial cost and the frequency of testing need not necessarily be given significant weight." 176	"underlying liability must be established based upon a recognized tort—e.g., negligence, strict liability, trespass, intentional conduct, etc." "lump-sum damage awards" may be appropriate. 178	Yes. ¹⁷⁹	Yes. ¹⁸⁰
Wisconsin	"actual, present injury." 181	N/A	N/A	N/A	N/A	N/A	No.
Wyoming	Unclear. ¹⁸²	N/A	N/A	N/A	N/A	N/A	No.
District of Columbia	"as a proximate result of that exposure, plaintiff suffers a significantly increased risk of contracting a serious latent disease." 183	"plaintiff was significantly exposed to a proven hazardous substance." ¹⁸⁴	"that increased risk makes periodic medical examinations reasonably necessary." 185	"monitoring and testing procedures exist which make the early detection and treatment of the disease possible and beneficial." 186	"negligent acts of the defendant" 187	Yes. ¹⁸⁸	No.

	Harm Required	Exposure Required	Need Required	Benefit Required	Other Requirements	Cause of Action	Highest Court
Guam	"As a proximate result of exposure, plaintiff suffers a <i>significantly increased risk</i> of contracting a serious latent disease." 189	"Plaintiff was significantly exposed to a proven hazardous substance." 190	"increased risk makes periodic diagnostic medical examinations reasonably necessary." 191	"Monitoring and testing procedures exist which make the early detection and treatment of the disease possible and beneficial." 192	"negligent actions of the defendant." 193	Unclear.	No.
Northern Mariana Islands	Unclear. 194	N/A	N/A	N/A	N/A	N/A	No.
Puerto Rico	Unclear. ¹⁹⁵	N/A	N/A	N/A	N/A	N/A	No.
Virgin Islands	"As a proximate result of exposure, plaintiff suffers a significantly increased risk of contracting a serious latent disease." 196	"Plaintiff was significantly exposed to a proven hazardous substance." 197	"That increased risk makes periodic diagnostic medical examinations reasonably necessary." 198	"Monitoring and testing procedures exist which make the early detection and treatment of the disease possible and beneficial." 199	"negligent actions of the defendant" ²⁰⁰	Yes. ²⁰¹	No. ²⁰²

¹ Hinton ex rel. Hinton v. Monsanto Co., 813 So. 2d 827, 831-32 (Ala. 2001).

 $^{^{2}}$ Id.

³ No authority located. *See In re NHL Players' Concussion Injury Litig.*, 327 F.R.D. 245, 262 (D. Minn. 2018) ("Some of the remaining states, such as Alaska . . . do not have any court decisions that clearly address the issues related to medical monitoring.").

⁴ In this exhibit, the **bold** in any quotation has been added for emphasis.

⁵ Burns v. Jaquays Mining Corp., 156 Ariz. 375, 380, 752 P.2d 28, 33 (Ariz. Ct. App. 1987).

⁶ *Id*.

⁷ *Id*.

⁸ *Id*.

⁹ *Id*.

¹⁰ *Id*.

¹¹ Burns, 156 Ariz. at 381, 752 P.2d at 34.

¹² In re NHL Players' Concussion Injury Litig., 327 F.R.D. at 262 ("Subsequent decisions make it unclear as to whether medical monitoring is a form of damages or a stand-alone cause of action in Arizona.").

¹³ In re Prempro Prods. Liab. Litig., 230 F.R.D. 555, 569 (E.D. Ark. 2005) ("Arkansas has rejected medical monitoring as a cause of action, and questions its availability as a remedy.") (citing Baker v. Wyeth–Ayerst Labs. Division, 338 Ark. 242, 992 S.W.2d 797, 799 (1999)).

¹⁴ Potter v. Firestone Tire & Rubber Co., 6 Cal. 4th 965, 1009, 863 P.2d 795, 824-25 (Cal. 1993).

¹⁵ *Id*.

¹⁶ *Id*.

¹⁷ *Id*.

¹⁸ *Id*.

¹⁹ *Id*.

²⁰ *Id*.

²¹ Potter, 6 Cal. 4th 965 at 1010 n.28, 863 P.2d at 825 n.28.

²² Potter, 6 Cal. 4th 965 at 1009, 863 P.2d at 825 (referring to test for "medical monitoring damages").

 $^{^{23}}$ *Id*.

²⁴ Bell v. 3M Co., 344 F. Supp. 3d 1207, 1225 (D. Colo. 2018).

²⁵ *Id*.

 $^{^{26}}$ *Id*.

²⁷ *Id*.

 $^{^{28}}$ *Id*.

²⁹ Id. at 1224 (predicting that "the Colorado Supreme Court would probably recognize a claim for medical monitoring absent present physical injury").

³⁰ The Connecticut Supreme Court "assume[d], without deciding" that a medical monitoring claim would require that "each plaintiff" prove that "(1) [t]he defendant's negligence (2) caused (3) the plaintiff to become exposed to a hazardous substance that produced, at least, subcellular changes that substantially increased the risk of serious disease, illness, or injury (4) for which an effective medical test for reliable early detection exists, (5) and early detection, combined with prompt and effective treatment, will significantly decrease the risk of death or the severity of the disease, illness or injury, and (6) such diagnostic medical examinations are reasonably (and periodically) necessary, conformably with the standard of care, and (7) the present value of the reasonable cost of such tests and care, as of the date of the filing of the complaint." *Dougan v. Sikorsky Aircraft Corp.*, 2020 WL 5521391, at *7 (Conn. Sept. 14, 2020) (quoting *Donovan v. Philip Morris USA, Inc.*, 455 Mass. 215, 226, 914 N.E.2d 891, 902 (2009)).

³¹ *Id*.

³² M.G. ex rel. K.G. v. A.I. Dupont Hosp. for Children, 393 F. App'x 884, 892 (3d Cir. 2010) ("we decline to predict whether the Delaware Supreme Court might acknowledge some variant of a medical monitoring claim.").

³³ Petito v. A.H. Robins Co., Inc., 750 So. 2d 103, 106-07 (Fla. Dist. Ct. App. 1999).

 $^{^{34}}$ *Id*.

³⁵ *Id*.

 $^{^{36}}$ *Id*.

³⁷ *Id*.

³⁸ *Id*.

³⁹ *Id.* at 105-06.

⁴⁰ *Id.* at 108 (recognizing "claim" for medical monitoring).

⁴¹ Cure v. Intuitive Surgical Inc., 705 F. App'x 826, 828 (11th Cir. 2017) (noting Georgia Court Appeals rejection of proposition that "the presence of elevated levels of heptachlor expoxide in their blood itself constituted 'injury.'" (alterations omitted)).

⁴² In re Hawaii Fed. Asbestos Cases, 734 F. Supp. 1563, 1567 (D. Haw. 1990) ("the mere presence of asbestos fibers, pleural thickening or pleural plaques in the lung unaccompanied by an objectively verifiable functional impairment is not enough."); cf. In re NHL Players' Concussion Injury Litig., 327 F.R.D. at 262 ("Some of the remaining states, such as . . . Hawaii, do not have any court decisions that clearly address the issues related to medical monitoring.").

⁴³ See In re NHL Players' Concussion Injury Litig., 327 F.R.D. at 262 ("Some of the remaining states, such as . . . Idaho . . . do not have any court decisions that clearly address the issues related to medical monitoring."); cf. Hepburn v. Bos. Sci. Corp., 2018 WL 2275219, at *4-5 (D. Idaho May 17, 2018) (concluding a plaintiff showing that "they have been exposed to harm and they have a genuine and reasonable fear of future harm" suffices as an injury under Idaho law and suggesting that plaintiff could establish a "cognizable legal injury" of "require[d] continual medical monitoring" by amending her complaint to explain "what type of medical monitoring she must endure, how invasive it is, how often she endures it, or how necessary the monitoring is").

⁴⁴ *Berry v. City of Chicago*, 2020 IL 124999, ¶ 34, 2020 WL 5668974, at *7 (III. 2020) ("there are practical reasons for requiring a showing of actual or realized harm before permitting recovery in tort."); *Almond v. Janssen Pharms., Inc.*, 2020 WL 6545892, at *4 (E.D. Pa. Nov. 6, 2020) (noting that the Illinois Supreme Court in *Berry* "expressly refused to recognize [a] common law claim[] for medical monitoring in the absence of physical injury").

⁴⁵ Berry, 2020 IL 124999, ¶ 34.

⁴⁶ Hostetler v. Johnson Controls, Inc., 2020 WL 5543081, at *4 n.4 (N.D. Ind. Sept. 16, 2020) ("It is unclear if Indiana would even recognize a claim for damages for medical monitoring based on an increased risk of future injury.").

⁴⁷ *Pickrell v. Sorin Grp. USA, Inc.*, 293 F. Supp. 3d 865, 868 (S.D. Iowa 2018) ("This Court finds that the Iowa Supreme Court would be unlikely to adopt a medical monitoring cause of action rooted in a negligence theory, especially absent an actual injury. Due to Iowa's requirement that negligence claims include an actual injury, this Court concludes that the Iowa Supreme Court, if confronted with the opportunity to recognize a medical monitoring cause of action, would either decline to do so or would require an actual injury.").

⁴⁸ No authority located; *cf. Burton v. R.J. Reynolds Tobacco Co.*, 884 F.Supp. 1515, 1523 n.6 (D. Kan. 1995) (stating in dicta: "a separate tort action for medical monitoring arises in an instance where a plaintiff has been exposed to hazardous materials, which may increase his or her susceptibility to contracting a latent disease, but the plaintiff has not yet suffered any injuries.").

⁴⁹ Wood v. Wyeth-Ayerst Lab., Div. of Am. Home Products, 82 S.W.3d 849, 859 (Ky. 2002) ("Thus, having weighed the few potential benefits against the many almost-certain problems of medical monitoring, we are convinced that this Court has little reason to allow such a remedy without a showing of present physical injury.").

⁵⁰ *Id*.

⁵¹ La. Civ. Code Ann. art. 2315 ("Damages do not include costs for future medical treatment, services, surveillance, or procedures of any kind unless such treatment, services, surveillance, or procedures are directly related to a manifest physical or mental injury or disease."); *see also Bourgeois v. A.P. Green Indus.*, *Inc.*, 783 So. 2d 1251, 1260 (La. 2001) ("Because a cause of action for medical monitoring of asymptomatic plaintiffs existed prior to the effective date of Act 989, plaintiffs have a vested right to assert their causes of action for medical monitoring if those rights accrued prior to July 9, 1999.").

⁵³ No authority located.

⁵⁴ Exxon Mobil Corp. v. Albright, 433 Md. 303, 388, 71 A.3d 30, 81, on reconsideration in part, 433 Md. 502, 71 A.3d 150 (2013).

⁵⁵ Exxon Mobil Corp., 433 Md. at 391, 71 A.3d at 84.

⁵⁶ Exxon Mobil Corp., 433 Md. at 388, 71 A.3d at 81-82.

⁵⁷ *Id*.

⁵⁸ *Id*.

⁵⁹ Exxon Mobil Corp., 433 Md. at 389, 71 A.3d at 82.

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<sup>60</sup> Id.
61 Exxon Mobil Corp., 433 Md. at 388, 71 A.3d at 81 ("In sum, we hold that Maryland recognizes a remedy of recovery for medical monitoring costs resulting
from exposure to toxic substances resulting from a defendant's tortious conduct.").
^{62} Id.
<sup>63</sup> Donovan v. Philip Morris USA, Inc., 455 Mass. 215, 226, 914 N.E.2d 891, 902 (2009).
<sup>64</sup> Id.
<sup>65</sup> Id.
<sup>66</sup> Id.
<sup>67</sup> Id.
<sup>68</sup> Id.
<sup>69</sup> Id.
<sup>70</sup> Donovan, 455 Mass. at 226 n.12, 914 N.E.2d at 902 n.12 (adding that a "plaintiff's reasonable attorney's fees and costs may be paid out of such award.").
<sup>71</sup> Id. at 902-03 (referring to "cause of action" for medical monitoring).
<sup>72</sup> Id.
<sup>73</sup> Henry v. Dow Chem. Co., 473 Mich. 63, 68, 72 (2005).
<sup>74</sup> Id.
<sup>75</sup> In re NHL Players' Concussion Injury Litig., 327 F.R.D. at 264 (discussing Bryson v. Pillsbury Co., 573 N.W.2d 718, 721 (Minn. Ct. App. 1998)); see also
Thompson v. Am. Tobacco Co., 189 F.R.D. 544, 552 (D. Minn. 1999) ("Given the novelty of the tort of medical monitoring and that the Minnesota Supreme Court
has yet to recognize it as an independent theory of recovery, this Court is not inclined at this time to find that such a tort of exists under Minnesota law."); Palmer
v. 3M Co., 2005 WL 5891911 (Minn. Dist. Ct. Apr. 26, 2005) ("medical monitoring is not recognized as an independent cause of action by Minnesota courts,
Plaintiffs' claim for medical monitoring must be dismissed.").
<sup>76</sup> Paz v. Brush Engineered Materials, Inc., 949 So. 2d 1, 5 (Miss. 2007).
<sup>77</sup> Id.
<sup>78</sup> Meyer ex rel. Coplin v. Fluor Corp., 220 S.W.3d 712, 718 & n.7 (Mo. 2007) (en banc) (noting that in "this appeal of a class certification decision, which is a
procedural matter, there is no need for this Court to establish precisely what must be proven in order to recover medical monitoring damages").
^{79} Id.
<sup>80</sup> Id.
<sup>81</sup> Id. at 717.
<sup>82</sup> Id. at 718 ("plaintiff can obtain damages for medical monitoring upon a showing . . . .").
^{83} Id.
84 Lamping v. Am. Home Prods. Inc., 2000 WL 35751402, *11 (Mont. Dist. Ct. Feb. 02, 2000).
<sup>85</sup> Id.
<sup>86</sup> Id.
<sup>87</sup> Id.
<sup>88</sup> Id.
<sup>89</sup> Id.
<sup>90</sup> Id.
<sup>91</sup> Id. ("public policy dictates Montana's recognition of an independent cause of action for medical monitoring under the specific facts of this case . . . .").
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⁹² Avila v. CNH Am. LLC, 2007 WL 2688613, at *1 (D. Neb. Sept. 10, 2007) ("I also agree with the defendants that Nebraska law does not recognize a claim for medical monitoring when no present physical injury is alleged.").

⁹³ Sadler v. PacifiCare of Nev., 130 Nev. 990, 1001, 340 P.3d 1264, 1272 (2014).

⁹⁴ *Id.* ("At this early stage of the district court action, and in light of our treatment of medical monitoring as a remedy, rather than a cause of action, we decline to identify specific factors that a plaintiff must demonstrate to establish entitlement to medical monitoring as a remedy.").

⁹⁵ Sadler, 130 Nev. at 1001, 340 P.3d at 1271.

⁹⁶ *Id.* (noting "our treatment of medical monitoring as a remedy, rather than a cause of action"); *id.* at 994 (noting that "the *Badillo* court concluded that there is no common law cause of action for medical monitoring in Nevada").

⁹⁷ *Id*.

⁹⁸ Hermens v. Textiles Coated Inc. No. 216-2017-cv-524, -525, slip. op. at 12 (N.H. Super. Ct., Hillsborough Cnty. N. March 16, 2018); Brown v. Saint-Gobain Performance Plastics Corp., 2018 WL 10517306, at *1-2 (D.N.H. Oct. 10, 2018) (noting that the "New Hampshire Supreme Court has not yet recognized such a claim" for medical monitoring without "present physical injury" but that "the Superior Court adopted the elements of a medical monitoring claim as laid out by the Supreme Court of West Virginia" in Bower v. Westinghouse Elec. Corp., 522 S.E.2d 424, 430 (W. Va. 1999)).

⁹⁹ Hermens. No. 216-2017-cv-524, -525, slip. op. at 12.

¹⁰⁰ Id.

¹⁰¹ *Id*.

 $^{^{102}}$ *Id*.

¹⁰³ *Id.* ("recognizing a claim for medical monitoring").

¹⁰⁴ Sinclair v. Merck & Co., Inc., 195 N.J. 51, 65, 948 A.2d 587, 595 (2008) ("Here, it is not disputed that plaintiffs do not allege a personal physical injury. Thus, we conclude that because plaintiffs cannot satisfy the definition of harm to state a product liability claim under the [New Jersey Product Liability Act], plaintiffs' claim for medical monitoring damages must fail.").

¹⁰⁵ Ayers v. Jackson Twp., 106 N.J. 557, 606, 525 A.2d 287, 312 (1987).

¹⁰⁶ *Id*.

¹⁰⁷ *Id*.

 $^{^{108}}$ *Id*.

¹⁰⁹ Ayers, 106 N.J. at 609, 525 A.2d at 314.

¹¹⁰ Ayers, 106 N.J. at 606, 525 A.2d at 312 ("we hold that the cost of medical surveillance is a compensable item of damages where").

¹¹¹ *Id*.

¹¹² No authority located.

¹¹³ Benoit v. Saint-Gobain Performance Plastics Corp., 959 F.3d 491, 501 (2d Cir. 2020) (interpreting Caronia v. Philip Morris USA, Inc., 22 N.Y.3d 439, 448, 5 N.E.3d 11, 16 (2013)).

¹¹⁴ *Id.* (referring to "costs of medical monitoring").

¹¹⁵ Caronia v. Philip Morris USA, Inc., 22 N.Y.3d 439, 446, 5 N.E.3d 11, 14 (2013) (answering in the negative to the following question: "Under New York Law, may a current or former longtime heavy smoker who has not been diagnosed with a smoking-related disease, and who is not under investigation by a physician for such a suspected disease, pursue an independent equitable cause of action for medical monitoring for such a disease?").

¹¹⁶ Curl v. Am. Multimedia, Inc., 187 N.C. App. 649, 657, 654 S.E.2d 76, 81 (2007) (emphasis in original).

¹¹⁷ Trina Mehl v. Canadian Pac. Ry., Ltd., 227 F.R.D. 505, 518 (D.N.D. 2005) ("Accordingly, it is clear North Dakota requires a legally cognizable injury to be present before damages may be awarded. Given these basic principles of North Dakota tort law, a plaintiff would be required to demonstrate a legally cognizable injury to recover any type of damages in a newly recognized tort, including a medical monitoring claim.").

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<sup>118</sup> Baker v. Chevron U.S.A. Inc., 533 F. App'x 509, 525 (6th Cir. 2013) (applying Ohio law).
<sup>119</sup> Id.
^{120} Id.
<sup>121</sup> Id.
<sup>122</sup> Id.
^{123} Id.
<sup>124</sup> Id.
<sup>125</sup> Id.
126 Hardwick v. 3M Co., 2019 WL 4757134, at *9 (S.D. Ohio Sept. 30, 2019), reconsideration denied, 2020 WL 4436347 (S.D. Ohio Aug. 3, 2020) (noting Sixth
Circuit cases for the proposition that "medical monitoring is an available remedy in a tort action under Ohio law.").
127 Cole v. ASARCO Inc., 256 F.R.D. 690, 695 (N.D. Okla. 2009) ("Oklahoma law requires plaintiffs to demonstrate an existing disease or physical injury before
they can recover the costs of future medical treatment that is deemed medically necessary."); see also McCormick v. Halliburton Co., 895 F. Supp. 2d 1152, 1159
(W.D. Okla. 2012) ("the Court concludes that the Oklahoma Supreme Court would not recognize a medical monitoring remedy in the absence of any guidance
from the Oklahoma legislature and would instead defer to the Oklahoma legislature to first recognize such a remedy."); Taylor v. Michelin N. Am., Inc., 2018 WL
1569495, at *6 (N.D. Okla. Mar. 30, 2018) (granting summary judgment to defendants on medical monitoring claim because "plaintiffs have not yet presented
evidence of physical injuries attributable to contaminants from the plant").
<sup>128</sup> Lowe v. Philip Morris USA, Inc., 344 Or. 403, 407, 183 P.3d 181, 182 (2008).
<sup>129</sup> Id.
<sup>130</sup> Redland Soccer Club, Inc. v. Dep't of the Army & Dep't of Def. of the U.S., 548 Pa. 178, 195-96 (1997).
<sup>131</sup> Id.
^{132} Id.
^{133} Id.
<sup>134</sup> Id.
<sup>135</sup> Id. at 189 n.6.
<sup>136</sup> Id. at 195 (referring to "elements of a cause of action for medical monitoring").
<sup>137</sup> Id.
138 Miranda v. Dacruz, 2009 WL 3515196, at *8 (R.I.Super. Ct. Oct. 26, 2009) (holding that it "is patently unfair to saddle Defendants with the cost of indefinite
monitoring considering [plaintiff] does not exhibit any present harm and there are numerous other superseding causes for these conditions").
139 Easler v. Hoechst Celanese Corp., 2014 WL 3868022, at *5 n.5 (D.S.C. Aug. 5, 2014) ("The court notes that if Easler intended to plead medical monitoring as
a state law claim, this claim would fail because South Carolina has yet to recognize a cause of action for medical monitoring.").
<sup>140</sup> No authority located.
<sup>141</sup> Sutton v. St. Jude Med. S.C., Inc., 419 F.3d 568, 576 n.7 (6th Cir. 2005) (noting that "Tennessee law is murky on the issue of whether claims for medical
monitoring are cognizable," but "there are reasons why such claims are most probably proper").
<sup>142</sup> Norwood v. Raytheon Co., 414 F. Supp. 2d 659, 665-67 (W.D. Tex. 2006).
<sup>143</sup> Hansen v. Mountain Fuel Supply Co., 858 P.2d 970, 979 (Utah 1993).
<sup>144</sup> Id.
<sup>145</sup> Id.
<sup>146</sup> Id.
<sup>147</sup> Id.
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<sup>148</sup> Id.
^{149} Id.
<sup>150</sup> Id. at 981.
<sup>151</sup> Id. at 980.
<sup>152</sup> Id.
<sup>153</sup> Id. at 979.
^{154} Id.
<sup>155</sup> Id. at 980.
<sup>156</sup> Id. at 979.
<sup>157</sup> Id. at 980.
^{158} Id.
<sup>159</sup> Id. at 982.
<sup>160</sup> Id. ("Because the cause of action we craft today . . . .").
<sup>161</sup> Id.
<sup>162</sup> Sullivan v. Saint-Gobain Performance Plastics Corp., 431 F. Supp. 3d 448, 466 (D. Vt. 2019) (applying Vermont law and noting that it is "premature to define
the exact requirements").
^{163} Id.
<sup>164</sup> Id.
<sup>165</sup> Id.
<sup>166</sup> Id.
<sup>167</sup> Id. at 470 (allowing "Plaintiffs to seek a medical monitoring remedy at trial").
<sup>168</sup> Ball v. Joy Techs., Inc., 958 F.2d 36, 39 (4th Cir. 1991) (applying Virginia law); see also In re All Pending Chinese Drywall Cases, 80 Va. Cir. 69 (Va. Cir. 2010)
("Therefore, although the claim for medical monitoring may in fact be a claim for which Plaintiffs have no adequate remedy at law, the Court does not find that it
has the authority to fashion that remedy without authorization or guidance from the General Assembly.").
<sup>169</sup> Duncan v. Nw. Airlines. Inc., 203 F.R.D. 601, 606 (W.D. Wash, 2001).
<sup>170</sup> Bower v. Westinghouse Elec. Corp., 206 W. Va. 133, 141, 522 S.E.2d 424, 432 (1999).
<sup>171</sup> Id.
<sup>172</sup> Id.
<sup>173</sup> Bower, 206 W. Va. at 142, 522 S.E.2d at 433.
<sup>174</sup> Bower, 206 W. Va at 141-42, 522 S.E.2d at 432-33.
<sup>175</sup> Bower, 206 W. Va at 142-43, 522 S.E.2d at 433-34.
<sup>176</sup> Bower. 206 W. Va at 142, 522 S.E.2d at 433.
<sup>177</sup> Id.
<sup>178</sup> Bower, 206 W. Va at 143, 522 S.E.2d at 434.
<sup>179</sup> Bower, 206 W. Va at 141, 522 S.E.2d at 432 (recognizing "a claim for medical monitoring").
<sup>180</sup> Id.
<sup>181</sup> Alsteen v. Wauleco, Inc., 2011 WI App 105, ¶ 26.
<sup>182</sup> No authority located.
<sup>183</sup> Arias v. DynCorp., 928 F. Supp. 2d 10, 16 n.2 (D.D.C. 2013) (citing Reed v. Philip Morris Inc., 1997 WL 538921, at *16 n.10 (D.C. Super. Aug. 18, 1997)).
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184 Id.
185 Id.
186 Id.
187 Id.
188 Id. (referring to "cause of action for medical monitoring").
189 Abuan v. Gen. Elec. Co., 3 F.3d 329, 334 (9th Cir. 1993) (Guam law); Duncan v. N.W. Airlines, Inc., 203 F.R.D. 601, 607 n.3 (W.D. Wash. 2001) (noting that Abuan decision on medical monitoring was dicta).
190 Id.
191 Id.
192 Id.
193 Id.
194 No authority located.
195 Barreras Ruiz v. Am. Tobacco Co., 180 F.R.D. 194, 197 (D.P.R. 1998) ("we will not consider the substantive question of whether Puerto Rico law authorizes

- ¹⁹⁷ *Id*.
- ¹⁹⁸ *Id*.
- ¹⁹⁹ *Id*.
- ²⁰⁰ *Id*.
- ²⁰¹ *Id.* (referring to "medical monitoring claim").

medical monitoring").

196 Josephat v. St. Croix Alumina, LLC, 2000 WL 1679502, at *11 (D.V.I. Aug. 7, 2000).

²⁰² Arno v. Hess Corp., 2019 WL 5295588, at *19 (V.I. Super. Ct. Oct. 17, 2019) (noting Virgin Islands has not yet recognized a cause of action for medical monitoring but citing *Josephat*).

Defendants' Appendix B Variation in Negligence Law*

	Relationship Required to Impose Duty?	Substantial Factor Test for Proximate Cause?	Highest Court	Statute of Limitations	Statute of Repose
Alabama	No. ¹	Unclear. ²	No. ³	2 years. ⁴	20 years. ⁵
Alaska	No.6	Yes. ⁷	Yes. ⁸	2 years. ⁹	10 years. ¹⁰
Arizona	Yes. ¹¹	Probably. ¹²	Yes. ¹³	2 years. ¹⁴	N/A.
Arkansas	Unclear.15	Probably. ¹⁶	Yes. ¹⁷	3 years. ¹⁸	N/A.
California	No. ¹⁹	No. ²⁰	Yes. ²¹	2 years. ²²	N/A.
Colorado	No. ²³	Yes. ²⁴	Yes. ²⁵	2 years. ²⁶	10 years. ²⁷
Connecticut	Yes. ²⁸	Yes. ²⁹	Yes. ³⁰	2 years. ³¹	10 years. ³²
Delaware	Probably not. ³³	No. ³⁴	Yes. ³⁵	2 years. ³⁶	N/A.
Florida	No. ³⁷	Probably. ³⁸	Yes. ³⁹	4 years. ⁴⁰	12 years. ⁴¹
Georgia	Unclear.	Probably not. ⁴²	No. ⁴³	2 years. ⁴⁴	10 years. ⁴⁵
Hawaii	Probably. ⁴⁶	Yes. ⁴⁷	Yes. ⁴⁸	2 years. ⁴⁹	N/A.
Idaho	Unclear.	Yes. ⁵⁰	Yes. ⁵¹	2 years. ⁵²	10 years. ⁵³
Illinois	Yes. ⁵⁴	Yes. ⁵⁵	Yes. ⁵⁶	2 years. ⁵⁷	10-12 years. ⁵⁸
Indiana	Yes. ⁵⁹	Yes. ⁶⁰	Yes. ⁶¹	2 years. ⁶²	10 years. ⁶³
Iowa	No. ⁶⁴	No. ⁶⁵	Yes. ⁶⁶	2 years. ⁶⁷	15 years. ⁶⁸
Kansas	No. ⁶⁹	Yes. ⁷⁰	Yes. ⁷¹	2 years. ⁷²	10 years. ⁷³
Kentucky	Probably not. ⁷⁴	Yes. ⁷⁵	Yes. ⁷⁶	1 year. ⁷⁷	5-8 years. ⁷⁸
Louisiana	Probably. ⁷⁹	Yes. ⁸⁰	Yes. ⁸¹	1 year. ⁸²	N/A.
Maine	Unclear.83	Yes. ⁸⁴	Yes. ⁸⁵	6 years. ⁸⁶	N/A.
Maryland	No. ⁸⁷	Yes. ⁸⁸	Yes. ⁸⁹	3 years. ⁹⁰	N/A.
Massachusetts	Probably. ⁹¹	Yes. ⁹²	Yes. ⁹³	3 years. ⁹⁴	N/A.

^{*} The analysis of state law in this document is preliminary and illustrative and should not be understood to represent the positions that Defendants will take on state law questions in this or any other case based a complete analysis of state law and the facts of particular claims.

	Relationship Required to Impose Duty?	Substantial Factor Test for Proximate Cause?	Highest Court	Statute of Limitations	Statute of Repose
Michigan	Yes. ⁹⁵	Yes. ⁹⁶	Yes. ⁹⁷	3 years. ⁹⁸	10 years. ⁹⁹
Minnesota	Probably not. ¹⁰⁰	Yes. ¹⁰¹	Yes. ¹⁰²	6 years. ¹⁰³	N/A.
Mississippi	No. ¹⁰⁴	Yes. ¹⁰⁵	Yes. ¹⁰⁶	3 years. ¹⁰⁷	N/A.
Missouri	Yes. 108	Probably. ¹⁰⁹	Yes. ¹¹⁰	5 years. ¹¹¹	N/A.
Montana	Unclear. ¹¹²	Yes. ¹¹³	Yes. ¹¹⁴	3 years. ¹¹⁵	N/A.
Nebraska	Probably not. ¹¹⁶	Yes. ¹¹⁷	Yes. ¹¹⁸	4 years. ¹¹⁹	10 years. ¹²⁰
Nevada	Unclear.	Yes. ¹²¹	Yes. ¹²²	2 years. ¹²³	N/A.
New Hampshire	Yes. ¹²⁴	Yes. ¹²⁵	Yes. ¹²⁶	3 years. ¹²⁷	N/A.
New Jersey	No. ¹²⁸	Yes. ¹²⁹	Yes. ¹³⁰	2 years. ¹³¹	N/A.
New Mexico	Yes. ¹³²	No. ¹³³	Yes. ¹³⁴	3 years. ¹³⁵	N/A.
New York	Yes. ¹³⁶	Yes. ¹³⁷	Yes. ¹³⁸	3 years. ¹³⁹	N/A.
North Carolina	Yes. ¹⁴⁰	Yes. ¹⁴¹	Yes. ¹⁴²	3 years. ¹⁴³	12 years. ¹⁴⁴
North Dakota	Yes. ¹⁴⁵	Maybe. ¹⁴⁶	No. ¹⁴⁷	6 years. ¹⁴⁸	N/A.
Ohio	Probably not. ¹⁴⁹	Maybe. 150	No. ¹⁵¹	2 years. ¹⁵²	10 years. ¹⁵³
Oklahoma	No. ¹⁵⁴	Maybe. 155	No. ¹⁵⁶	2 years. ¹⁵⁷	N/A.
Oregon	No. ¹⁵⁸	Yes. ¹⁵⁹	Yes. ¹⁶⁰	2 years. ¹⁶¹	10 years. ¹⁶²
Pennsylvania	No. ¹⁶³	Yes. ¹⁶⁴	Yes. ¹⁶⁵	2 years. ¹⁶⁶	N/A.
Rhode Island	No. ¹⁶⁷	Maybe. ¹⁶⁸	No. ¹⁶⁹	3 years. ¹⁷⁰	N/A.
South Carolina	Yes. ¹⁷¹	Maybe. ¹⁷²	No.	3 years. ¹⁷³	N/A.
South Dakota	No. ¹⁷⁴	Yes. ¹⁷⁵	Yes. ¹⁷⁶	3 years. ¹⁷⁷	N/A.
Tennessee	No. ¹⁷⁸	Yes. ¹⁷⁹	Yes. ¹⁸⁰	1 year. ¹⁸¹	6-10 years. ¹⁸²
Texas	No. ¹⁸³	Yes. ¹⁸⁴	Yes. ¹⁸⁵	2 years. ¹⁸⁶	15 years. ¹⁸⁷
Utah	No. ¹⁸⁸	Yes. ¹⁸⁹	Yes. ¹⁹⁰	2 years. ¹⁹¹	N/A.
Vermont	No. ¹⁹²	Probably not. ¹⁹³	Yes. ¹⁹⁴	3 years. ¹⁹⁵	N/A.
Virginia	No. ¹⁹⁶	Unclear. 197	No. ¹⁹⁸	2 years. ¹⁹⁹	N/A.

	Relationship Required to Impose Duty?	Substantial Factor Test for Proximate Cause?	Highest Court	Statute of Limitations	Statute of Repose
Washington	Unclear. ²⁰⁰	Yes. ²⁰¹	Yes. ²⁰²	3 years. ²⁰³	12 years. ²⁰⁴
West Virginia	No. ²⁰⁵	Maybe. ²⁰⁶	No. ²⁰⁷	2 years. ²⁰⁸	N/A.
Wisconsin	Unclear.	Yes. ²⁰⁹	Yes. ²¹⁰	3 years. ²¹¹	N/A.
Wyoming	No. ²¹²	Yes. ²¹³	Yes. ²¹⁴	4 years. ²¹⁵	N/A.
District of Columbia	No. ²¹⁶	Yes. ²¹⁷	Yes. ²¹⁸	3 years. ²¹⁹	N/A.
Guam	Unclear.	Yes. ²²⁰	Yes. ²²¹	2 years. ²²²	N/A.
Northern Mariana Islands	Unclear.	Unclear.	No.	2 years. ²²³	N/A.
Puerto Rico	Probably not. ²²⁴	Unclear.	No.	1 year. ²²⁵	N/A.
U.S. Virgin Islands	Unclear.	Yes. ²²⁶	Yes. ²²⁷	2 years. ²²⁸	N/A.

¹ See DiBiasi v. Joe Wheeler Elec. Membership Corp., 988 So. 2d 454, 461 (Ala. 2008) (relationship is relevant to duty analysis, but not required).

² The Alabama Supreme Court has declined to address whether the substantial-factor test applies to proximate causation analysis. *See Bobo v. TVA*, 2015 WL 3833879, at *19 (N.D. Ala. June 22, 2015) (certifying question, which was later declined). Although the Supreme Court has approvingly cited, in an asbestos case, a case applying a substantial-factor test, the court expressly did not decide which standard applied. *Kruse v. Vanderbilt Minerals, LLC*, 189 So. 3d 42, 57-58 (Ala. 2015); *see Bobo v. TVA*, 855 F.3d 1294, 1309 (11th Cir. 2017).

³ See Bobo, 2015 WL 3833879, at *19); Kruse, 189 So. 3d at 57-58; see also Bobo, 855 F.3d at 1309.

⁴ Ala. Code § 6-2-38(*l*); *Mitchell v. Thornley*, 98 So.3d 556, 559 (Ala. Civ. App. 2012).

⁵ See Ex parte Liberty Nat'l Life Ins. Co., 825 So. 2d 758, 763 (Ala. 2002) ("Since 1858, causes of action asserted in Alabama courts more than 20 years after they could have been asserted have been considered to have been extinguished by the rule of repose.").

⁶ See Joseph v. State, 26 P.3d 459, 473 (Alaska 2001) (relationship is relevant to duty analysis, but not required).

⁷ Winschel v. Brown, 171 P.3d 142, 148 (Alaska 2007).

⁸ See id.

⁹ Alaska Stat. § 09.10.070(a).

¹⁰ Alaska Stat. § 09.10.055. However, the statute of repose does not apply if "the personal injury, death, or property damage resulted from . . . a defective product." *Id.* § 09.10.055(b)(1)(E).

¹¹ Although some relationship is required to support a finding of duty, there need not be a "preexisting relationship[]" between the parties. *Quiroz v. ALCOA Inc.*, 416 P.3d 824, 829 (Ariz. 2018) ("Unlike duties based on special relationships, duties based on public policy do not necessarily require preexisting relationships."). ¹² *See Thompson v. Better-Bilt Aluminum Prods. Co., Inc.*, 832 P.2d 203, 207 (Ariz. 1992); *cf. Barrett v. Harris*, 86 P.3d 954, 961 & n.8 (Ariz. App. 2004) (noting

potential conflict but applying substantial-factor test).

¹³ See Thompson, 832 P.2d at 207.

¹⁴ Ariz. Rev. Stat. § 12-542; Rowland v. Kellogg Brown & Root, Inc., 115 P.3d 124, 126 (Ariz. App. 2005).

¹⁵ See Fields v. Wyeth, Inc., 613 F. Supp. 2d 1056, 1060 n.1 (W.D. Ark. 2009) (noting, in case where plaintiff sued manufacturers of type of drug plaintiff consumed but not the particular drugs plaintiff consumed, that "[i]t is doubtful that any duty exists under the present facts and as a matter of Arkansas law" because duty "arises out of the recognition that relations between individuals may impose upon one a legal obligation for the other"; however, court went on to decide case based on proximate causation) (citation omitted).

¹⁶ See Boyd v. Reddick, 573 S.W.2d 634, 677-78 (Ark. 1978) ("[T]he trial court properly instructed the jury on the question of intervening proximate cause and that it was within the province of the jury to determine whether appellee Reddick's conduct was a substantial factor in producing the damage complained of").

¹⁷ See id.

¹⁸ Ark. Code § 16-56-105; Bryan v. City of Cotter, 344 S.W.3d 654, 656 (Ark. 2009).

¹⁹ *Kesner v. Superior Court*, 384 P.3d 283, 304 (Cal. 2016) ("Although we have held that the existence of a relationship between the plaintiff and the defendant is one basis for finding liability premised on the conduct of a third party, we have never held that such a relationship is a prerequisite to finding that a defendant had a duty to prevent injuries due to its own conduct or possessory control.") (internal citation omitted).

²⁰ See Mitchell v. Gonzales, 819 P.2d 872, 873 & n.2 (Cal. 1991) (substantial-factor test applies to cause in fact rather than proximate cause analysis).

²¹ See id.

²² Cal. Code Civ. Proc. § 335.1; So v. Shin, 212 Cal. App. 4th 652, 662 (2013).

²³ Westin Operator, LLC v. Groh, 347 P.3d 606, 612 (Colo. 2015) (relationship is relevant to duty analysis, but not required).

²⁴ See Ekberg v. Greene, 588 P.2d 375, 377 (Colo. 1978) ("Where the circumstances make it likely that defendant's negligence will result in injuries to others and where this negligence is a substantial factor in causing the injuries sustained, the requirement of proximate causation is satisfied.").

²⁵ *Id*.

²⁶ Colo. Rev. Stat. § 13-80-102(1)(a).

²⁷ "Ten years after a product is first sold for use or consumption, it shall be rebuttably presumed that the product was not defective and that the manufacturer or seller thereof was not negligent and that all warnings and instructions were proper and adequate." Colo. Rev. Stat. § 13-21-403(3).

²⁸ See Neil v. Shiels, Inc., 347 A.2d 102, 107 (Conn. 1974) ("Unless some relationship exists between the person injured and the defendant, by which the latter owes a duty to the former, there can be no liability for negligence."); Angiolillo v. Buckmiller, 972 A.2d 312, 322 (Conn. App. 2007) ("There was no relationship between the . . . defendants and [plaintiff] that would give rise to such a duty.").

²⁹ Paige v. St. Andrew's Roman Catholic Church Corp., 734 A.2d 85, 91 (Conn. 1999).

 $^{^{30}}$ *Id*.

³¹ Conn. Gen. Stat. § 52-584.

³² Conn. Gen. Stat. § 52-577a(a) ("No product liability claim [including one based on negligence] . . . may be brought against any party . . . later than ten years from the date that the party last parted with possession or control of the product."). *But see id.* § 52-577c(b) (applying discovery rule to certain claims based on "exposure to a hazardous chemical substance or mixture or hazardous pollutant released into the environment").

³³ See Ramsey v. Georgia S. Univ. Advanced Dev. Ctr., 189 A.3d 1255, 1273-74 & nn.92-93 (Del. 2018).

³⁴ Culver v. Bennett, 588 A.2d 1094, 1098-99 (Del. 1991).

³⁵ *Id*.

³⁶ 10 Del. Code § 8119; see Morton v. Sky Nails, 884 A.2d 480, 481 (Del. 2005).

³⁷ See Sewell v. Racetrac Petrol., Inc., 245 So.3d 822, 825-26 (Fla. 3d DCA 2017) (relationship is relevant to duty analysis, but not required).

³⁸ See McCain v. Florida Power Corp., 593 So. 2d 500, 503 (Fla. 1992) ("[H]arm is 'proximate' in a legal sense if prudent human foresight would lead one to expect that similar harm is likely to be *substantially caused* by the specific act or omission in question.") (emphasis added); *see also Guinn v. AstraZeneca Pharms. LP*, 598 F. Supp. 2d 1239, 1246 (M.D. Fla. 2009) (questioning whether substantial-factor test is limited to concurrent-cause cases).

³⁹ See McCain, 593 So. 2d at 503.

⁴⁰ Fla. Stat. § 95.11(3)(a).

⁴¹ Fla. Stat. § 95.031(2)(b)(2) (encompassing negligence actions that qualify as products liability actions). *But see id.* § 95.031(2)(c)-(d) (identifying exceptions to statute of repose).

⁴² See John Crane, Inc. v. Jones, 604 S.E.2d 822, 825 & n.4 (Ga. 2004) (criticizing application of substantial-factor test to proximate cause).

⁴³ See id.

⁴⁴ Ga. Code § 9-3-33; see Harris v. Fulton DeKalb Hosp. Auth., 255 F. Supp. 2d 1347, 1374 (N.D. Ga. 2002).

⁴⁵ Ga. Code § 51-1-11(c).

⁴⁶ See Bodell Constr. Co. v. Ohio Pac. Tech, Inc., 458 F. Supp. 2d 1153, 1166 (D. Haw. 2006) (granting summary judgment for defendant on plaintiffs' negligence claim where "no contract existed between them and there is nothing to suggest any other type of relationship that would impose a duty on [defendant]"); see also Bailey v. United States, 289 F. Supp. 2d 1197, 1211 (D. Haw. 2003) ("The Hawaii Supreme Court has stated that the existence of a duty is guided by several principles. First, the existence of a duty depends on whether a relation exists between the parties that the community determines imposes a legal obligation upon one for the benefit of the other. In other words, the existence of a duty turns on whether the interest of a plaintiff who has suffered invasion is entitled to legal protection at the expense of a defendant. Second, whether a duty exists is a question of fairness that involves weighing the nature of the risk, the magnitude of the burden of guarding against the risk, and the public interest in the proposed solution. Third, a court will not impose a new duty 'without any logical, sound, and compelling reasons taking into consideration the social and human relationships of our society."") (citation omitted).

⁴⁷ See Estate of Frey v. Mastroianni, 463 P.3d 1197, 1207, 1210 (Haw. 2020).

⁴⁸ See id.

⁴⁹ Haw. Rev. Stat. § 657-7; *Mansha Consulting LLC v. Alakai*, 236 F. Supp. 3d 1267, 1272 (D. Haw. 2017).

⁵⁰ Applies when there are multiple possible causes of injury. *Garcia v. Windley*, 164 P.3d 819, 823 (Idaho 2007); *see also Fouche v. Chrysler Motors Corp.*, 692 P.2d 345, 348-49 (Idaho 1984).

⁵¹ See Garcia, 164 P.3d at 823; Fouche, 692 P.2d at 348-49.

⁵² Idaho Code § 5-219(4); *Morningstar Holding Corp. v. G2, LLC*, 2012 WL 287517, at *11 (D. Idaho Jan. 31, 2012).

⁵³ Idaho Code § 6-1403(2); see Oats v. Nissan Motor Corp. in U.S.A., 879 P.2d 1095 (Idaho 1994) (applying statute of repose in case alleging negligence, among other claims).

⁵⁴ Nelson v. Aurora Equip. Co., 909 N.E.2d 931, 939 (Ill. App. Ct. 2009) (holding, in take-home asbestos case, that "no duty exists because no relationship exists").

⁵⁵ In Illinois, proximate cause breaks down into cause in fact and foreseeability, with substantial-factor test applicable only to the former. *Donaldson v. Central Ill. Pub. Serv. Co.*, 767 N.E.2d 314, 331 (Ill. 2002), *abrogated in other part by In re Commitment of Simons*, 821 N.E.2d 1184 (Ill. 2004); *Rahic v. Satellite Air-Land Motor Serv., Inc.*, 24 N.E.3d 315, 321 (Ill. App. 2014).

⁵⁶ See Donaldson, 767 N.E.2d at 331.

⁵⁷ 735 ILCS 5/13-202; Zachman v. Citibank, N.A., 183 F. Supp. 3d 922, 924 (N.D. Ill. 2016).

⁵⁸ 735 ILCS 5/13-213(b).

⁵⁹ *Rodriguez v. U.S. Steel Corp.*, 24 N.E.3d 474, 477 (Ind. App. 2014) ("A duty of reasonable care is not, of course, owed to the world at large, but arises out [of the] relationship between the parties.") (citation omitted).

⁶⁰ See Huey v. Milligan, 175 N.E.2d 698, 703 (Ind. 1961).

⁶¹ See id.

⁶² Ind. Code § 34-20-3-1(b)(1); *DuRocher v. Riddell, Inc.*, 97 F. Supp. 3d 1006, 1029 (S.D. Ind. 2015).

⁶³ Ind. Code § 34-20-3-1(b)(2).

65 Thompson v. Kaczinski, 774 N.W.2d 829, 837-39 (Iowa 2009).

⁶⁴ Knake v. King, 492 N.W.2d 416, 417 (Iowa 1992) ("A particular relationship between the actor and victim is not an absolute requirement in establishing a legal duty or standard of due care, especially when the consequences of a negligent act cause[] harm to another.").

⁶⁶ See id.

⁶⁷ Iowa Code § 614.1(2); see Herbst v. Givaudan Flavors Corp., 2019 WL 6108098, at *5 (N.D. Iowa Aug. 19, 2019).

⁶⁸ Iowa Code § 614.1(2A).

⁶⁹ See Manley v. Hallbauer, 387 P.3d 185, 188 (Kan. App. 2016) ("In Kansas, courts apply a foreseeability test: A person owes a duty if (1) the plaintiff is a foreseeable plaintiff and (2) the probability of harm is foreseeable.").

⁷⁰ Burnette v. Eubanks, 425 P.3d 343, 351 (Kan. 2018).

⁷¹ *Id*.

⁷² Kan. Stat. § 60-513(a)(4); see LCL, LLC v. Falen, 390 P.3d 571, 576 (Kan. App. 2017).

⁷³ Kan. Stat. § 60-3303.

⁷⁴ It appears that foreseeability, rather than relationship, is the focus of the duty analysis. *See M & T Chem., Inc. v. Westrick*, 525 S.W.2d 740, 741 (Ky. App. 1974) ("Every person owes a duty to every other person to exercise ordinary care in his activities to prevent any foreseeable injury from occurring to such other person."). *But see Johnson v. S.O.S. Transp., Inc.*, 926 F.2d 516, 520 (6th Cir. 1991) ("[T]he continued viability of the universal duty concept under Kentucky law is questionable."). Nonetheless, the universal-duty rule continues to be cited post-*Johnson. See Wilson v. United States*, 2014 WL 3866047, at *4 (E.D. Ky. Aug. 6, 2014); *Stevenson v. Mohon*, 2014 WL 6872169, at *7 (Ky. App. Dec. 5, 2014) (unpublished).

⁷⁵ See Gonzalez v. Johnson, 581 S.W.3d 529, 533-34 (Ky. 2019).

⁷⁶ See id.

⁷⁷ Ky. Rev. Stat. § 413.140(1)(a); *Kendall v. Godbey*, 537 S.W.3d 326, 335 (Ky. App. 2017).

⁷⁸ Ky. Rev. Stat. § 411.310(1) ("In any product liability action, it shall be presumed, until rebutted by a preponderance of the evidence to the contrary, that the subject product was not defective if the injury, death or property damage occurred either more than five (5) years after the date of sale to the first consumer or more than eight (8) years after the date of manufacture.").

⁷⁹ See Labarre v. Occidental Chem. Co., 250 So. 3d 932, 938-39 (La. App. 2018) ("Whether a legal duty exists, and the extent of that duty, depends on the facts and circumstances of the case, and the relationship of the parties."). But see Chaisson v. Avondale Indus., Inc., 947 So. 2d 171, 181-84 (La. App. 2006) (holding that employer of worker exposed to asbestos owed duty to worker's wife).

⁸⁰ Sinitiere v. Lavergne, 391 So. 2d 821, 825 (La. 1980).

⁸¹ *Id*.

⁸² La. Civ. Code, art. 3492; *Reggio v. E.T.I.*, 15 So. 3d 951, 956-57 (La. 2008).

⁸³ A relationship between the parties is at least relevant to the duty analysis, but it is unclear whether it's necessary. *See, e.g., FDIC v. S. Prawer & Co.*, 829 F. Supp. 439, 452-53 (D. Me. 1993) (dismissing NIED claim by plaintiff against defendants who interacted with husband's company, noting that plaintiff "had no relationship to those parties"); *Zemco Indus., Inc. v. FCW Techs., Inc.*, 2004 WL 237716, at *3 (Me. Super. Ct. Jan. 20, 2004) (rejecting indemnification/contribution claim based on negligence for lack of duty where there was "no relationship" between plaintiff and defendant).

⁸⁴ Cyr v. Adamar Assocs. Ltd. P'ship, 752 A.2d 603, 604 (Me. 2000).

⁸⁵ *Id*.

⁸⁶ 14 Me. Rev. Stat. § 752; Frontier Commc'ns Corp. v. Barrett Paving Materials, Inc., 631 F. Supp. 2d 110, 115 (D. Me. 2009).

⁸⁷ See Kennedy Krieger Inst., Inc. v. Partlow, 191 A.3d 425, 450-51 (Md. 2018) (relationship is relevant to duty analysis, but not required).

⁸⁸ In Maryland, proximate cause breaks down into cause in fact and foreseeability, with the substantial-factor test applicable only to the former. *See Copsey v. Park*, 160 A.3d 623, 636 (Md. 2017); *Eagle-Picher Indus., Inc. v. Balbos*, 604 A.2d 445, 459 (Md. 1992).

⁸⁹ See Copsey, 160 A.3d at 636); Eagle-Picher Indus., 604 A.2d at 459.

⁹⁰ Md. Code, Cts. & Jud. Proc. § 5-101; see *Ukaegbu v. Select Portfolio Servicing, Inc.*, 2017 WL 2930465, at *9 (D. Md. July 7, 2017).

⁹¹ See Dhimos v. Cormier, 509 N.E.2d 1199, 1201 (Mass. 1987) ("Absent a relationship, we cannot say that there was a duty of care owed by the defendants to the plaintiff"); *Miranda v. Anderson*, 2006 WL 2006134, at *3 (Mass. Super. Ct. Apr. 6, 2006) (holding that aunt of teen driver who collided with plaintiff's car owed plaintiff no duty because "[t]here was no relationship between [the aunt] and the plaintiff").

⁹² Tritsch v. Boston Edison Co., 293 N.E.2d 264, 266-67 (Mass. 1973).

⁹³ *Id*.

⁹⁴ Mass. Gen. Laws, ch. 260 § 2A; *Khatchatourian v. Encompass Ins. Co. of Mass.*, 935 N.E.2d 777, 780 (Mass. App. 2010).

⁹⁵ In re Certified Question from Fourteenth Dist. Court of Appeals of Tex., 740 N.W.2d 206, 212 (Mich. 2007) ("[W]hen there is no relationship between the parties, no duty can be imposed.").

⁹⁶ Brisboy v. Fibreboard Corp., 418 N.W.2d 650, 653 (Mich. 1988).

⁹⁷ *Id*.

⁹⁸ Mich. Comp. Laws § 600.5805; see Schaendorf v. Consumers Energy Co., 739 N.W.2d 402, 404-05 (Mich. App. 2007).

⁹⁹ Mich. Comp. Laws § 600.5805(12) ("[F]or a product that has been in use for not less than 10 years, the plaintiff, in proving a prima facie case, must do so without the benefit of any presumption.") (footnote omitted).

¹⁰⁰ See Miller v. Redwood Toxicology Lab., Inc., 688 F.3d 928, 937 (8th Cir. 2012) ("Determining whether a duty exists requires an assessment of (1) the relationship of the parties, and (2) the foreseeability of the risk involved."); Dunnigan v. Federal Home Loan Mortg. Corp., 184 F. Supp. 3d 726, 739 (D. Minn. 2016) (Freddie Mac owed no duty to plaintiff where "whatever relationship existed between Freddie Mac and [plaintiff] was more attenuated than the relationship between [plaintiff] and her lenders, and lenders owe no general duty of care to borrowers").

¹⁰¹ See Osborne v. Twin Town Bowl, Inc., 749 N.W.2d 367, 372 (Minn. 2008).

¹⁰² See id.

¹⁰³ Minn. Stat. § 541.05, subd. 1(5); *Lickteig v. Kolar*, 782 N.W.2d 810, 815 (Minn. 2010).

¹⁰⁴ Chatman v. Pfizer, Inc., 960 F. Supp. 2d 641, 654 (S.D. Miss. 2013) ("As a general rule, in the context of negligence claims a relationship is *not* necessary for a duty to exist."); se Scafide v. Bazzone, 962 So. 2d 585, 592 (Miss. App. 2006) ("Determining whether a duty is owed is approached by asking 'whether the plaintiff's interests are entitled to legal protection against the defendant's conduct,' rather than focusing solely on the level of relationship between parties.").

¹⁰⁵ See McCorkle v. United Gas Pipe Line Co., 175 So.2d 480, 487 (Miss. 1965).

¹⁰⁶ See id.

¹⁰⁷ Miss. Code § 15-1-49; *Alston v. Pope*, 112 So. 3d 422, 424 n.3 (Miss. 2013).

¹⁰⁸ Parra v. Building Erection Servs., 982 S.W.2d 278, 283 (Mo. App. 1998) ("The common denominator that must be present is the existence of a relationship between the plaintiff and defendant that the law recognizes as the basis of a duty of care.") (citation omitted); accord Nat'l Union Fire Ins. Co. of Pittsburgh, Pa. v. Raczkowski, 764 F.3d 800, 803 (8th Cir. 2014). But see Groppel Co., Inc. v. U.S. Gypsum Co., 616 S.W.2d 49, 56 (Mo. App. 1981) ("While privity, or the lack of it, may be a relevant factor to consider when deciding if a duty is owed, we perceive no sound reason why it should be the determinative factor.").

¹⁰⁹ Nesselrode v. Executive Beechcraft, Inc., 707 S.W.2d 371, 381 (Mo. 1986) ("Under established principles of causation, the proximate cause of an event or injury need only be a substantial factor or efficient causal agent."). But see Callahan v. Cardinal Glennon Hosp., 863 S.W.2d 852, 863 (Mo. 1993).

¹¹⁰ See Nesselrode, 707 S.W.2d at 381.

¹¹¹ Mo. Stat. § 516.120; State ex rel. Heart of Am. Council v. McKenzie, 484 S.W.3d 320, 324 (Mo. 2016).

¹¹² Compare Seal v. Hart, 50 P.3d 522, 528 (Mont. 2002) ("The question of duty is a problem of the relation between individuals which imposes upon one a legal obligation for the benefit of the other. In other words, in order for [plaintiff] to prevail against [defendant], he had to establish some relationship between the parties which obliged [defendant] to a particular standard of conduct.") (internal citation omitted), with Fisher v. Swift Transp. Co., Inc., 181 P.3d 601, 606-07 ("At the most basic level, we all share the common law duty to exercise the level of care that a reasonable and prudent person would under the same circumstances. . . .

In analyzing whether a duty exists, we consider whether the imposition of that duty comports with public policy, and whether the defendant could have foreseen that his conduct could have resulted in an injury to the plaintiff.").

- ¹¹³ In Montana, proximate cause breaks down into cause in fact and foreseeability, with the substantial-factor test applicable only to former. *See Gaudreau v. Clinton Irrigation Dist.*, 30 P.3d 1070, 1076 (Mont. 2001); *Estate of Strever v. Cline*, 924 P.2d 666, 672 (Mont. 1996).
- ¹¹⁴ See Gaudreau, 30 P.3d at 1076; Estate of Strever, 924 P.2d at 672.
- ¹¹⁵ Mont. Code § 27-2-204; *Nelson v. Nelson*, 50 P.3d 139, 142 (Mont. 2002).
- ¹¹⁶ See Erickson v. U-Haul Int'l, Inc., 738 N.W.2d 453, 459-63 (Neb. 2007) (holding that lessor may have owed duty to warn third party despite absence of relationship; "When determining whether a legal duty exists for actionable negligence, a court considers (1) the magnitude of the risk, (2) the relationship of the parties, (3) the nature of the attendant risk, (4) the opportunity and ability to exercise care, (5) the foreseeability of the harm, and (6) the policy interest in the proposed solution"). But see id. at 460 ("The duty of reasonable care generally does not extend to third parties absent other facts establishing a duty. The common law has traditionally imposed liability only if the defendant bears some special relationship to the potential victim.") (footnote omitted).
- ¹¹⁷ Kudlacek v. Fiat S.p.A., 509 N.W.2d 603, 611-12 (Neb. 1994).
- ¹¹⁸ *Id*.
- ¹¹⁹ Neb. Rev. Stat. § 25-207; Keith v. Data Enters., Inc., 925 N.W.2d 723, 732 (Neb. App. 2019).
- ¹²⁰ Neb. Rev. Stat. § 25-224(2). This statute of repose applies only to products manufactured in Nebraska; for products manufactured elsewhere, the applicable statute of repose is that of the state or country of manufacture, if one exists.
- ¹²¹ Holcomb v. Georgia Pac., LLC, 289 P.3d 188, 196 (Nev. 2012).
- ¹²² *Id*.
- ¹²³ Nev. Rev. Stat. § 11.190; Garner v. Bank of Am. Corp., 2014 WL 1945142, at *4 (D. Nev. May 13, 2014).
- ¹²⁴ *Guitarini v. Macallen Co.*, 95 A.2d 784, 785 (N.H. 1953) ("The relation of the parties determines whether any duty to use due care is imposed by law upon one party for the benefit of another. 'If there is no relationship, there is no duty.'").
- ¹²⁵ Estate of Joshua T. v. State, 840 A.2d 768, 771 (N.H. 2003).
- 126 *Id*.
- ¹²⁷ N.H. Rev. Stat. § 508:4; *Pichowicz v. Watson Ins. Agency, Inc.*, 768 A.2d 1048, 1049 (N.H. 2001).
- ¹²⁸ See Snyder v. American Ass'n of Blood Banks, 676 A.2d 1036, 1048 (N.J. 1996) ("The absence of a contractual or special relationship is not dispositive."); see also Robinson v. Vivirito, 86 A.3d 119, 124 (N.J. 2014) ("Foreseeability is a critical but not dispositive factor in the analysis of whether a duty of care to avoid harm to a third party is recognized. Foreseeability often subsumes many factors deemed relevant to the recognition of a duty. Those factors include the relationship between the plaintiff and the alleged negligent party, the nature of the risk, and the ability to alter behavior to avoid injury to another.") (internal citations omitted).
- ¹²⁹ Brown v. U.S. Stove Co., 484 A.2d 1234, 1243 (N.J. 1984).
- 130 *Id*.
- ¹³¹ N.J. Stat. § 2A:14-2(a); Kowalsky v. Deutsche Bank Nat'l Trust Co., 2015 WL 5770523, at *5 (D.N.J. Sept. 30, 2015).
- ¹³² See Calkins v. Cox Estates, 792 P.2d 36, 39 (N.M. 1990) (a plaintiff "must show that a relationship existed by which defendant was legally obliged to protect the interest of plaintiff").
- ¹³³ See id. at 42 n.6.
- ¹³⁴ *Id*.
- ¹³⁵ N.M. Stat. § 37-1-8; *Nowell v. Medtronic Inc.*, 372 F. Supp. 3d 1166, 1242 (D.N.M. 2019).
- ¹³⁶ In re New York City Asbestos Litig., 840 N.E.2d 115, 119 (N.Y. 2005) ("Generally, such a duty may arise only 'where there is a relationship either between defendant and a third-person tortfeasor that encompasses defendant's actual control of the third person's actions, or between defendant and plaintiff that requires defendant to protect plaintiff from the conduct of others."") (citation omitted).
- 137 New York courts use the term "substantial cause." *Derdiarian v. Felix Contracting Corp.*, 414 N.E.2d 666, 670 (N.Y. 1980).

¹³⁸ *Id*.

- ¹³⁹ N.Y. C.P.L.R. § 214; *Zimmerman v. Poly Prep Country Day Sch.*, 888 F. Supp. 2d 317, 336 (E.D.N.Y. 2012).
- ¹⁴⁰ See McCants v. National Coll. Ath. Ass'n, 201 F. Supp. 3d 732, 738 (M.D.N.C. 2016) (citing Pinnix v. Toomey, 87 S.E.2d 893, 897 (N.C. 1955)); Durkee v. C.H. Robinson Worldwide, Inc., 765 F. Supp. 2d 742, 748 (W.D.N.C. 2011) (citing Kientz v. Carlton, 96 S.E.2d 14, 17 (N.C. 1957)).
- ¹⁴¹ Brown v. Neal, 197 S.E.2d 505, 509 (N.C. 1973); Gillikin v. Burbage, 139 S.E.2d 753, 759 (N.C. 1965).
- ¹⁴² See Brown, 197 S.E.2d at 509; Gillikin, 139 S.E.2d at 759.
- ¹⁴³ N.C. Gen. Stat. § 1-52; *Birtha v. Stonemor*, N.C., LLC, 727 S.E.2d 1, 7 (N.C. App. 2012).
- ¹⁴⁴ N.C. Gen. Stat. § 1-46.1(1).
- ¹⁴⁵ See Azure v. Belcourt Pub. Sch. Dist., 681 N.W.2d 816, 820 (N.D. 2004) ("Duty is essentially a question of whether the relationship between the actor and the injured person gives rise to any legal obligation on the actor's part for the benefit of the injured person."); accord Hoff v. Elkhorn Bar, 613 F. Supp. 2d 1146, 1156 (D.N.D. 2009).
- ¹⁴⁶ See Reagan v. Hi-Speed Checkwigher Co., Inc., 1993 WL 733715, at *4 (D.N.D. Apr. 20, 1993); Andrews v. O'Hearn, 387 N.W.2d 716, 726-27 (N.D. 1986).
- ¹⁴⁷ See Andrews, 387 N.W.2d at 726-27.
- ¹⁴⁸ N.D. Cent. Code § 28-01-16; see Kuntz v. Muehler, 603 N.W.2d 43, 47 (N.D. 1999).
- ¹⁴⁹ See Vadaj v. French, 89 N.E.3d 73, 77 (Ohio App. 2017) (although "duty' is 'the relationship between the plaintiff and the defendant from which arises an obligation on the part of the defendant to exercise due care toward the plaintiff," "[t]he existence of a duty depends on the foreseeability of the injury."); see also Asad v. Continental Airlines, Inc., 328 F. Supp. 2d 772, 782-83 (N.D. Ohio 2004) ("[U]nder Ohio law, a legal duty may be imposed in misfeasance actions if the resulting injury was foreseeable, but in nonfeasance actions such duties are limited to certain types of relationships.").
- ¹⁵⁰ See In re: E. I. Du Pont De Nemours & Co. C-8 Personal Injury Litig., 2016 WL 659112, at *62-64 (S.D. Ohio) (Sargus, C.J.); Pang v. Minch, 559 N.E.2d 1313, 1324 (Ohio 1990) (adopting substantial-factor test when "a plaintiff suffers a single injury as a result of the tortious acts of multiple defendants").
- ¹⁵¹ See In re: E. I. Du Pont De Nemours & Co. C-8 Personal Injury Litig., 2016 WL 659112, at *62-64.
- ¹⁵² Ohio R.C. § 2305.10; *Nadra v. Mbah*, 893 N.E.2d 829, 834 (Ohio 2008).
- ¹⁵³ Ohio R.C. § 2305.10(C)(1).
- ¹⁵⁴ See Smith v. Central Mine Equip. Co., 876 F. Supp. 2d 1261, 1268-69 (W.D. Okla. 2012) ("The contours of this duty, however, depend on the relationship of the parties and the facts and circumstances of a particular case. The most important consideration in determining whether a defendant owes a duty of care is the foreseeability of harm to the plaintiff.") (internal citation omitted); see also Lowery v. Echostar Satellite Corp., 160 P.3d 959, 964 (Okla. 2007) ("We have long recognized that without regard to the relationship of the parties, a person owes a duty of care to another person whenever the circumstances place the one person in a position towards the other person such that an ordinary prudent person would recognize that if he or she did not act with ordinary care and skill in regard to the circumstances, he or she may cause danger of injury to the other person.").
- ¹⁵⁵ See Brigance v. Velvet Dove Rest., Inc., 725 P.2d 300, 305 (Okla. 1986) (approvingly citing New Jersey decision applying substantial-factor test without expressly adopting it); see also Clark v. Penn Square Mall Ltd. P'ship, 2013 WL 599569, at *2 (W.D. Okla. Feb. 13, 2013) (applying substantial-factor test in case governed by Oklahoma law).
- ¹⁵⁶ See Brigance, 725 P.2d at 305.
- ¹⁵⁷ 12 Okla. Stat. § 95; Cabinet Sols., L.L.C. v. Kelley, 288 P.3d 254, 256 (Okla. Civ. App. 2012).
- ¹⁵⁸ See Clement v. Ecolab, Inc., 341 F. Supp. 3d 1205, 1214-14 (D. Or. 2018) ("In the absence of a specific duty created, defined, or limited by a specified status, relationship or standard of conduct, 'the issue of liability for harm actually resulting from defendant's conduct properly depends on whether that conduct unreasonably created a foreseeable risk to a protected interest of the kind of harm that befell the plaintiff.") (quoting Fazzolari ex rel. Fazzolari v. Portland Sch. Dist., 734 P.2d 1326 (Or. 1987)); JH Kelly, LLC v. Quality Plus Servs., Inc., 472 P.3d 280, 286 (Or. App. 2020) ("Negligence in Oregon extends to the limits of the general principles of foreseeability articulated in Fazzolari . . . ").
- ¹⁵⁹ Sworden v. Gross, 409 P.2d 897, 898 (Or. 1966).

¹⁶⁰ *Id*.

- ¹⁶¹ Or. Rev. Stat. § 12.110; Torch v. Windsor Surry Co., 2019 WL 6709379, at *7 (D. Or. Dec. 9, 2019).
- ¹⁶² Or. Rev. Stat. § 30.905(2) ("A product liability civil action for personal injury or property damage must be commenced before the later of: (a) Ten years after the date on which the product was first purchased for use or consumption; or (b) The expiration of any statute of repose for an equivalent civil action in the state in which the product was manufactured, or, if the product was manufactured in a foreign country, the expiration of any statute of repose for an equivalent civil action in the state into which the product was imported.").
- ¹⁶³ Althaus ex rel. Althaus v. Cohen, 756 A.2d 1166, 1169 (Pa. 2000) (relationship is relevant to duty analysis, but not required).
- ¹⁶⁴ Rost v. Ford Motor Co., 151 A.3d 1032, 1049 (Pa. 2016).

¹⁶⁵ *Id*.

¹⁶⁶ 42 Pa. Cons. Stat. § 5524(2).

- ¹⁶⁷ Oliver v. Narragansett Bay Ins. Co., 205 A.3d 445, 453 (R.I. 2019) (relationship is relevant to duty analysis, but not required).
- ¹⁶⁸ See Wells v. Uvex Winter Optical, Inc., 635 A.2d 1188, 1191 (R.I. 1994).

¹⁶⁹ See id.

- ¹⁷⁰ R.I. Gen. Laws § 9-1-14; *McNulty v. Chip*, 116 A.3d 173, 180 n.7 (R.I. 2015).
- ¹⁷¹ *McCullough v. Goodrich & Pennington Mortg. Fund, Inc.*, 644 S.E.2d 43, 47 (S.C. 2007) ("In order for liability to attach based on a theory of negligence, the parties must have a relationship recognized by law as providing the foundation for a duty to prevent an injury."); *Andrade v. Johnson*, 588 S.E.2d 588, 592 (S.C. 2003) (same).
- ¹⁷² See Anderson v. United States, 2015 WL 9918406, at *17-20 (D.S.C. Oct. 9, 2015) (applying substantial-factor test to negligence claim governed by South Carolina claim); Little v. Brown & Williamson Tobacco Corp., 243 F. Supp. 2d 480, 498-99 (D.S.C. 2001) (applying substantial-factor test to product liability claim under South Carolina law); see also Wallace v. Milliken & Co., 389 S.E.2d 448, 450 (S.C. App. 1990) (approvingly citing Restatement (Second) of Torts' substantial-factor test in non-negligence proximate-cause analysis).
- ¹⁷³ S.C. Code § 15-3-530; Cline v. J.E. Faulkner Homes, Inc., 597 S.E.2d 27, 29 (S.C. App. 2004).
- ¹⁷⁴ Johnson v. Hayman & Assocs., Inc., 867 N.W.2d 698, 702 (S.D. 2015) ("[T]he lack of a relationship between the parties is not necessarily fatal to the duty determination.").
- ¹⁷⁵ Mulder v. Tague, 186 N.W.2d 884, 887 (S.D. 1971).

¹⁷⁶ *Id*.

¹⁷⁷ S.D. Codified Laws § 15-2-12.2.

- ¹⁷⁸ Satterfield v. Breeding Insulation Co., 266 S.W.3d 347, 362-64 (Tenn. 2008).
- ¹⁷⁹ McClenahan v. Cooley, 806 S.W.2d 767, 775 (Tenn. 1991).

¹⁸⁰ *Id*.

- ¹⁸¹ Tenn. Code § 28-3-104; see Woody v. Kelley, 2020 WL 6568866, at *3 (W.D. Tenn. Nov. 9, 2020).
- ¹⁸² Tenn. Code § 29-28-103(a).
- ¹⁸³ See West Houston Airport, Inc. v. Millennium Ins. Agency, Inc., 349 S.W.3d 748, 753-54 (Tex. App. 2011) ("[T]he nature of the relationship between the plaintiff and defendant is a significant consideration in determining the existence of a duty of care," but "foreseeability of harm is the principal factor to consider when determining whether a party owes a duty"); accord Texas Home Mgmt., Inc. v. Peavy, 89 S.W.3d 30, 33-34 (Tex. 2002).
- ¹⁸⁴ In Texas, proximate cause breaks down into cause in fact and foreseeability, with the substantial-factor test applicable only to the former. *See McClure v. Allied Stores of Tex.*, *Inc.*, 608 S.W.2d 901, 903 (Tex. 1980).

¹⁸⁵ See id.

- ¹⁸⁶ Tex. Civ. Prac. & Rem. Code § 16.003; *JPMorgan Chase Bank, N.A. v. Professional Pharmacy II*, 508 S.W.3d 391, 414 (Tex. App. 2014).
- ¹⁸⁷ Tex. Civ. Prac. & Rem. Code § 16.012(c).

- ¹⁸⁸ See B.R. ex rel. Jeffs v. West, 275 P.3d 228, 230 (Utah 2012) ("[T]he legal-relationship factor is typically a 'plus' factor—used to impose a duty where one would otherwise not exist, such as where the act complained of is merely an omission."); see also Pyper v. Reil, 437 P.3d 493, 498-99 (Utah App. 2018) ("Courts determine the existence of a duty as a matter of law, which depends on "the legal relationship between the parties, the foreseeability of injury, the likelihood of injury, public policy as to which party can best bear the loss occasioned by the injury, and other general policy considerations.") (internal citation omitted).

 ¹⁸⁹ See McCorvey v. Utah State Dep't of Transp., 868 P.2d 41, 45 (Utah 1993).
- ¹⁹⁰ See id.
- ¹⁹¹ Utah Code § 78B-6-706; see Mecham v. C.R. Bard, Inc., 2020 WL 2768997, at *3 (D. Utah May 27, 2020).
- ¹⁹² See Long Trail House Condo. Ass'n v. Engelberth Constr., Inc., 59 A.3d 752, 757 (Vt. 2012) (relationship is relevant to duty analysis, but not required).
- ¹⁹³ See Wilkins v. Lamoille Cty. Mental Health Servs., Inc., 898 A.2d 245, 251 (Vt. 2005) ("[W]e have occasionally employed the phrase 'substantial factor' in referring to proximate cause . . . but we have never abandoned the but-for test of causation or suggested that 'substantial factor' represents anything other than an equivalent formulation of the but-for test."). But see Hamblin v. United States, 327 F. Supp. 2d 315, 324 (D. Vt. 2004).
- ¹⁹⁴ See Wilkins, 898 A.2d at 251.
- ¹⁹⁵ 12 Vt. Stat. § 512; see Soutiere v. Betzdearborn, Inc., 189 F. Supp. 2d 183, 189 (D. Vt. 2002).
- ¹⁹⁶ Quisenberry v. Huntington Ingalls Inc., 818 S.E.2d 805, 808 (Va. 2018) (holding that it "is not dispositive as to the existence of a duty" that the parties are "strangers under the law").
- ¹⁹⁷ In an old case, the Virginia Supreme Court of Appeals cited the original Restatement's discussion of the substantial-factor test regarding proximate causation with some approval. *Spence v. American Oil Co.*, 197 S.E. 468, 474 (Va. 1938).
- ¹⁹⁸ See id.
- ¹⁹⁹ Va. Code § 8.01-243; *Laws v. McIlroy*, 724 S.E.2d 699, 702 (Va. 2012).
- ²⁰⁰ The parties' relationship is relevant to duty determination, but it's not clear whether it's required. *See Squires v. McLaughlin*, 265 P.2d 265, 269 (Wash. 1953) ("The duty which one person owes to another depends in part on the relationship existing between them."); *Christensen v. Weyerhaeuser Timber Co.*, 133 P.2d 797, 800 (Wash. 1943) ("In determining the question of what its duties were, so far as the deceased was concerned, the legal relationship between the parties must be considered.").
- ²⁰¹ However, the test applies only in "a narrow class of cases." *Dunnington v. Virginia Mason Med. Ctr.*, 389 P.3d 498, 501-02 (Wash. 2017).
- ²⁰² See id.
- ²⁰³ Both general statute (Wash. Rev. Code § 4.16.080) and product liability statute (*id.* § 7.72.060) are 3 years, and it's unclear which one applies. *See Green v. A.P.C.* (Am. Pharm. Co.), 960 P.2d 912, 915 (Wash. 1998).
- ²⁰⁴ Wash. Rev. Code § 7.72.060(2).
- ²⁰⁵ See Aikens v. Debow, 541 S.E.2d 576, 581 (W. Va. 2000) ("The ultimate test of the existence of a duty to use care is found in the foreseeability that harm may result if it is not exercised.") (citation omitted).
- ²⁰⁶ See Ward v. West, 445 S.E.2d 753, 756 (W. Va. 1994) (approvingly citing decisions applying substantial-factor tests in negligence case); *Thornton v. CAMC*, *Etc.*, 305 S.E.2d 316, 324-25 (W. Va. 1983) (adopting substantial-factor test for malpractice actions alleging increased risk of injury).
- ²⁰⁷ See Ward, 445 S.E.2d at 756; Thornton, 305 S.E.2d at 324-25.
- ²⁰⁸ W. Va. Code § 55-2-12; *Richards v. Walker*, 813 S.E.2d 923, 927 n.8 (W. Va. 2018).
- ²⁰⁹ Milwaukee & Suburban Transport Corp. v. Royal Transit Co., 139 N.W.2d 595, 599 (Wis. 1966).
- ²¹⁰ *Id*.
- ²¹¹ Wis. Stat. § 893.54; Ledford v. Baenen, 2018 WL 1709411, at *3 (E.D. Wis. Apr. 9, 2018).
- ²¹² See Rice v. Collins Commc'n, Inc., 236 P.3d 1009, 1014-15 (Wyo. 2010) (relationship is relevant to duty analysis, but not required).
- ²¹³ *Lucero v. Holbrook*, 288 P.3d 1228, 1234 (Wyo. 2012) ("In order to qualify as a legal cause, the conduct must be a substantial factor in bringing about the plaintiff's injuries.").

²¹⁴ *Id*.

²¹⁵ Wyo. Stat. § 1-3-105; *Tolman v. Stryker Corp.*, 926 F. Supp. 2d 1255, 1259 (D. Wyo. 2013).

²¹⁶ Presley v. Commercial Moving & Rigging, Inc., 25 A.3d 873, 888 (D.C. 2011) ("[A] determination of whether a duty exists is the result of a variety of considerations and not solely the relationship between the parties.") (citation omitted).

²¹⁷ See Alliegro v. ACandS, Inc., 691 A.2d 102, 106 n.11 (D.C. 1997).

²¹⁸ See id.

²¹⁹ D.C. Stat. § 12-301(8); *Patteson v. AstraZeneca, LP*, 876 F. Supp. 2d 27, 37 (D.D.C. 2012).

²²⁰ See Fenwick v. Watabe Guam, Inc., 2009 WL 126628, at *4 (Guam Jan. 21, 2009).

²²¹ See id.

²²² 7 Guam Code § 11306.

²²³ 7 CMC § 2503; see Flores v. First Hawaiian Bank, 2013 WL 12188155, at *8 (D.N. Mar. I. Nov. 8, 2013).

Relationship appears to be sufficient, but not necessary, to establish a duty. See Sanchez v. Seguros Triple S, Inc., 687 F. Supp. 2d 6, 9 (D.P.R. 2010) ("Puerto Rico law dictates a duty to act arises: (1) by a statute, regulation, ordinance, bylaw or contract; (2) as the result of a special relationship between the parties that has arisen through custom; or (3) as the result of a traditionally recognized duty of care particular to the situation."); Albertorio-Santiago v. Reliable Fin. Servs., 612 F. Supp. 2d 159, 169 (D.P.R. 2009) ("Under Puerto Rico law, a legal duty arises in one of three ways: (1) by a statute, regulation, ordinance, bylaw, or contract; (2) as the result of a special relationship between the parties that has arisen through custom; or (3) as the result of a traditionally recognized duty of care particular to the situation.").

²²⁵ 31 Laws of P.R. § 5298.

²²⁶ See Molloy v. Independence Blue Cross, 56 V.I. 155, 180 n.6 (2012).

²²⁷ See id.

²²⁸ 5 V.I. Code § 31; *Jacobs v. Hilton Worldwide Holdings, Inc.*, 2020 WL 5579825, at *7 (D.V.I. Sept. 17, 2020).

Defendants' Appendix C Variation in Battery Law*

	Elements	Heightened Intent	Offensiveness Or Physical Impairment	Highest Court	Statute of Limitations	Statute of Repose
Alabama	"(1) the defendant touched the plaintiff; (2) the defendant intended to touch the plaintiff; and (3) the touching was conducted in a harmful or offensive manner."	No. ²	No physical impairment required and chemical exposure may be sufficient for offensive contact. ³	Yes. ⁴	6 years. ⁵	N/A
Alaska	"A person commits the tort of battery when the actor intends to cause harmful or offensive contact with another; one need not intend injury but must intend to cause contact."	Yes. ⁷	Unclear.8	Partial. ⁹	2 years. ¹⁰	10 years. ¹¹
Arizona	"[A] battery claim requires proof that the defendant intended to cause harmful or offensive contact with the plaintiff." 12	Yes. ¹³	No physical impairment required. ¹⁴	Partial. ¹⁵	2 years. ¹⁶	N/A
Arkansas	Battery requires a showing that the actor "intended to cause harmful or offensive contact with [another] or acted with the intent to create the apprehension of some harmful or offensive contact and that this contact resulted in and caused damages." ¹⁷	Yes. ¹⁸	Unclear. ¹⁹	Partial. ²⁰	1 year. ²¹	N/A
California	"(1) defendant touched plaintiff, or caused plaintiff to be touched, with the intent to harm or offend plaintiff; (2) plaintiff did not consent to the touching; (3) plaintiff was harmed or offended by defendant's conduct; and (4) a reasonable person in plaintiff's position would have been offended by the touching." ²²	Yes. ²³	No physical impairment required, ²⁴ and chemical exposure may be sufficient for offensive contact. ²⁵	No.	2 years. ²⁶	N/A
Colorado	Action intended to cause a harmful or offensive contact with another, and resulting harmful or offensive contact. ²⁷	Yes. ²⁸	No physical impairment required. ²⁹	Yes. ³⁰	2 years. ³¹	N/A

^{*} The analysis of state law in this document is preliminary and illustrative and should not be understood to represent the positions that Defendants will take on state law questions in this or any other case based a complete analysis of state law and the facts of particular claims.

	Elements	Heightened Intent	Offensiveness Or Physical Impairment	Highest Court	Statute of Limitations	Statute of Repose
Connecticut	"An actor is subject to liability to another for battery if (a) he acts intending to cause a harmful or offensive contact with the person of the other or a third person, or an imminent apprehension of such a contact, and (b) a harmful contact with the person of the other directly or indirectly results." ³²	No—reduced threshold for intent permitting recklessness or negligence. ³³	Unclear whether physical impairment required ³⁴ or whether chemical exposure may be sufficient for a harmful contact. ³⁵	Partial. ³⁶	3 years. ³⁷	N/A
Delaware	"[B]attery is the intentional, unpermitted contact upon the person of another which is harmful or offensive." 38	No. ³⁹	No physical impairment required. 40 Unclear whether chemical exposure may be sufficient for offensive contact.	Yes. ⁴¹	2 years. ⁴²	N/A
Florida	"Battery consists of the infliction of a harmful or offensive contact upon another with the intent to cause such contact or the apprehension that such contact is imminent."	No. ⁴⁴	No physical impairment required. ⁴⁵	Partial. ⁴⁶	4 years. ⁴⁷	N/A
Georgia	"[A]ny unlawful touching is a physical injury to the person and is actionable. Generally speaking, an 'unlawful' touching is one which is 'offensive,' and an 'offensive' touching is one which proceeds from anger, rudeness, or lust."	Uncertain.	No physical impairment required, ⁴⁹ and exposure to particulate matter may be sufficient for offensive contact. ⁵⁰	No.	2 years. ⁵¹	N/A
Hawaii	"[A] defendant causes battery when he or she intentionally causes bodily contact to the plaintiff in a way not justified by the plaintiff's apparent wishes or by a privilege, and the contact is in fact harmful or against the plaintiff's will."52	No. ⁵³	Chemical exposure sufficient for offensive contact. ⁵⁴	No.	2 years. ⁵⁵	N/A
Idaho	Battery "requires intentional bodily contact which is either harmful or offensive." ⁵⁶	No. ⁵⁷	No physical impairment required. ⁵⁸	Yes. ⁵⁹	2 years. ⁶⁰	N/A
Illinois	"A battery is defined as the unauthorized touching of the person of another" and requiring an affirmative act intended to cause an unpermitted contact. ⁶¹	Yes. ⁶²	Chemical exposure sufficient for offensive contact. ⁶³	No.	2 years. ⁶⁴	N/A

	Elements	Heightened Intent	Offensiveness Or Physical Impairment	Highest Court	Statute of Limitations	Statute of Repose
Indiana	"[B]attery requires a 'harmful or offensive contact with a person, resulting from an act intended to cause the plaintiff or a third person to suffer such a contact, or apprehension that such a contact is imminent." 65	Yes. ⁶⁶	Chemical exposure probably sufficient for offensive contact. ⁶⁷	Partial. ⁶⁸	2 years. ⁶⁹	N/A
Iowa	"An actor is subject to liability to another for battery if a. he acts intending to cause a harmful or offensive contact with the person of the other or a third person, or an imminent apprehension of such a contact, and b. an offensive contact with the person of the other directly or indirectly results."	Uncertain.	No physical impairment required. ⁷¹	Partial. ⁷²	2 years. ⁷³	N/A
Kansas	"Battery is defined as the unprivileged touching or striking of one person by another, done with the intent of bringing about either a contact or an apprehension of contact, that is harmful or offensive." ⁷⁴	Yes. ⁷⁵	No physical impairment required. ⁷⁶	Yes. ⁷⁷	1 year. ⁷⁸	10 years. ⁷⁹
Kentucky	"[A] battery is any unlawful touching of the person of another, either by the aggressor, or by any substance set in motion by him or her."80	No. ⁸¹	Exposure to particulate matter sufficient for offensive contact. ⁸²	No.	1 year. ⁸³	N/A
Louisiana	"A harmful or offensive contact with a person, resulting from an act intended to cause the plaintiff to suffer such a contact." 84	No. ⁸⁵	Chemical exposure sufficient for offensive contact. ⁸⁶	Yes. ⁸⁷	1 year. ⁸⁸	N/A
Maine	"[A]n unlawful touching of the person of another, unpermitted and unprivileged, done with the intention of bringing about a harmful or offensive contact." 89	No. ⁹⁰	Likely no physical impairment required. ⁹¹	Partial. ⁹²	6 years. ⁹³	N/A
Maryland	"[T]he tort of battery requires intent by the actor 'to bring about a harmful or offensive contact [It is] confined to intentional invasions of the interests in freedom from harmful or offensive contact.""94	Yes. ⁹⁵	Chemical exposure probably sufficient for offensive contact. ⁹⁶	No.	3 years. ⁹⁷	N/A

	Elements	Heightened Intent	Offensiveness Or Physical Impairment	Highest Court	Statute of Limitations	Statute of Repose
Massachusetts	"An actor is subject to liability to another for battery if [a] he acts intending to cause a harmful or offensive contact with the person of the other or a third person, or an imminent apprehension of such a contact, and [b] a harmful contact with the person of the other directly or indirectly results." 98	No. ⁹⁹	Unclear, but exposure to particulate matter may not be sufficient for offensive contact. 100	Partial. ¹⁰¹	3 years. ¹⁰²	N/A
Michigan	"[T]he wilful and harmful or offensive touching of another person which results from an act intended to cause such a contact." 103	No. ¹⁰⁴	Chemical or particulate matter exposure sufficient for offensive contact. 105	No.	2 years. ¹⁰⁶	N/A
Minnesota	"A battery is defined as an intentional unpermitted offensive contact with another." 107	No. ¹⁰⁸	Chemical exposure probably sufficient for offensive contact. 109	Partial. ¹¹⁰	2 years. ¹¹¹	N/A
Mississippi	"[A]n assault occurs when a person (1) acts intending to cause a harmful or offensive contact with the person of the other or a third person, or an imminent apprehension of such contact, and (2) the other person is thereby put in such imminent apprehension A battery goes one step beyond an assault in that a harmful contact actually occurs."	Yes. ¹¹³	Chemical exposure sufficient for offensive contact. ¹¹⁴	Yes. ¹¹⁵	1 year. ¹¹⁶	N/A
Missouri	"To recover damages for a battery, the plaintiff must plead and prove an intended, offensive bodily contact with another person." ¹¹⁷	Uncertain.	No physical impairment required. 118	No.	2 years. ¹¹⁹	N/A
Montana	"An actor is subject to liability to another for battery if (a) he acts intending to cause a harmful or offensive contact with the person of the other or a third person, or an imminent apprehension of such a contact, and (b) a harmful contact with the person of the other directly or indirectly results." ¹²⁰	Uncertain.	No physical impairment required. 121	Partial. ¹²²	2 years. ¹²³	N/A
Nebraska	"Battery is an intentional tort which includes physical contact with another without consent or justification." 124	Probably not. ¹²⁵	Chemical exposure probably sufficient for offensive contact. 126	No.	4 years. ¹²⁷	N/A
Nevada	"A battery is an intentional and offensive touching of a person who has not consented to the touching." 128	No. ¹²⁹	Uncertain.	No.	2 years. ¹³⁰	N/A

	Elements	Heightened Intent	Offensiveness Or Physical Impairment	Highest Court	Statute of Limitations	Statute of Repose
New Hampshire	"A defendant may be held liable for battery if (a) he acts intending to cause a harmful or offensive contact with the person of the other or a third person, or imminent apprehension of such a contact, and (b) a harmful contact with the person of the other directly or indirectly results." ¹³¹	Uncertain. ¹³²	Uncertain.	No.	3 years. ¹³³	N/A
New Jersey	Common-law battery is an intentional tort involving he harmful or offensive touching of plaintiff's person without his consent." Yes. 135 Chemical exposure sufficient for offensive contact. 136		No.	2 years. ¹³⁷	N/A	
New Mexico	"A tortfeasor is liable for battery if (1) he acts intending to cause a harmful or offensive contact with the person of the other or a third person, or an imminent apprehension of such a contact, and (2) an offensive contact with the person of the other directly or indirectly results." ¹³⁸	No. ¹³⁹	No physical impairment required. 140	No.	3 years. ¹⁴¹	N/A
New York	"To establish a battery it need only be shown that the defendant made bodily contact with the plaintiff and that the contact was either offensive in nature or without his or her consent." 142	Unclear. ¹⁴³	Exposure to emissions probably sufficient for offensive contact. ¹⁴⁴	No.	1 year. ¹⁴⁵	N/A
North Carolina	"An assault is an offer to show violence to another without striking him, and a battery is the carrying of the threat into effect by the infliction of a blow.' 146	No—reduced threshold for intent permitting recklessness or gross negligence. ¹⁴⁷	Physical impairment required for battery claims based on exposure to smoke. ¹⁴⁸	No.	3 years. ¹⁴⁹	10 years. 150
North Dakota	"(1) An actor is subject to liability to another for battery if (a) he acts intending to cause a harmful or offensive contact with the person of the other or a third person, or an imminent apprehension of such a contact, and (b) an offensive contact with the person of the other directly or indirectly results." ¹⁵¹	Unclear.	No physical impairment required. 152	No.	2 years. ¹⁵³	N/A

	Elements	Heightened Intent	Offensiveness Or Physical Impairment	Highest Court	Statute of Limitations	Statute of Repose
Ohio	the act complained of must be an 'intentional, matter exposur		Chemical or particulate matter exposure sufficient for offensive contact. 156	No.	1 year. ¹⁵⁷	N/A
Oklahoma	"An actor is subject to liability to another for battery if (a) he acts intending to cause a harmful or offensive contact with the person of the other or a third person, or an imminent apprehension of such a contact, and (b) a harmful contact with the person of the other directly or indirectly results." No physical is required. 160 Yes. 159 No physical is required. 160 required. 160		No physical impairment required. 160	Yes. ¹⁶¹	2 years. ¹⁶²	N/A
Oregon	"To constitute liability for a battery, the conduct which brings about the harm must be an act of volition on the actor's part, and the actor must have intended to bring about a harmful or offensive contact or put the other party in apprehension thereof." ¹⁶³	Yes. ¹⁶⁴	No physical impairment required, and chemical exposure probably sufficient for offensive contact. ¹⁶⁵	Partial. ¹⁶⁶	2 years. ¹⁶⁷	N/A
Pennsylvania	"[A] harmful or offensive contact with a person, resulting from an act intended to cause the plaintiff or a third person to suffer such a contact, or apprehension that such a contact is imminent." 168	No. ¹⁶⁹	Chemical or particulate matter exposure sufficient for offensive contact. ¹⁷⁰	No.	2 years. ¹⁷¹	N/A
Rhode Island	**		Yes. ¹⁷⁵	3 years. ¹⁷⁶	N/A	
South Carolina	"[A] <i>battery</i> is the unlawful touching or striking of another by the aggressor himself or by any substance put in motion by him, done with the intention of bringing about a harmful or offensive contact which is not legally consented to by the other, and not otherwise privileged." ¹⁷⁷	No—reduced threshold for intent. ¹⁷⁸	No physical impairment required. 179	Yes. ¹⁸⁰	3 years. ¹⁸¹	N/A
South Dakota	"[A]ny willful and unlawful use of force or violence upon the person of another." 182	No. ¹⁸³	Unclear.	Partial. ¹⁸⁴	2 years. ¹⁸⁵	N/A

	Elements	Heightened Intent	Offensiveness Or Physical Impairment	Highest Court	Statute of Limitations	Statute of Repose
Tennessee	"A battery necessarily requires an unpermitted touching of the plaintiff by the defendant or by some object set in motion by the defendant." 186	Unclear.	No physical impairment required. 187	No.	1 year. ¹⁸⁸	N/A
Texas	"A person commits a battery if he intentionally or knowingly causes physical contact with another when he knows or should reasonably believe the other person will regard the contact as offensive or provocative." 189	Yes. ¹⁹⁰	No physical impairment required. ¹⁹¹ Chemical exposure probably insufficient for offensive contact. ¹⁹²	Yes. ¹⁹³	2 years. ¹⁹⁴	N/A
Utah	An actor will be liable for battery if: "(a) he acts intending to cause a harmful or offensive contact with the person of the other or a third person, or an imminent apprehension of such a contact, and (b) a harmful contact with the person of the other directly or indirectly results." ¹⁹⁵	No. ¹⁹⁶	No physical impairment required. 197	Yes. ¹⁹⁸	4 years. ¹⁹⁹	N/A
Vermont	Battery "is an intentional act that results in harmful contact with another." ²⁰⁰	Unclear. ²⁰¹	Unclear. ²⁰²	No.	3 years. ²⁰³	N/A
Virginia	"The tort of battery is an unwanted touching which is neither consented to, excused, nor justified." 204	Yes. ²⁰⁵	No physical impairment required. Chemical exposure probably sufficient for offensive contact. ²⁰⁶	No.	2 years. ²⁰⁷	N/A
Washington	"A battery is [a] harmful or offensive contact with a person, resulting from an act intended to cause the plaintiff or a third person to suffer such a contact." 208	No. ²⁰⁹	No physical impairment required. ²¹⁰	Partial. ²¹¹	2 years. ²¹²	N/A
West Virginia	"An actor is subject to liability to another for battery if (a) he acts intending to cause a harmful or offensive contact with the person of the other or a third person, or an imminent apprehension of such a contact, and (b) a harmful contact with the person of the other directly or indirectly results." 213	No. ²¹⁴	No physical impairment required. Chemical exposure not sufficient for offensive contact. ²¹⁵	Partial. ²¹⁶	2 years. ²¹⁷	N/A

	Elements	Heightened Intent	Offensiveness Or Physical Impairment	Highest Court	Statute of Limitations	Statute of Repose
Wisconsin	"A battery is the intentional, unprivileged, harmful or offensive touching of a person by another." ²¹⁸	Probably not. ²¹⁹	No physical impairment required. ²²⁰ Chemical exposure probably sufficient for offensive contact. ²²¹	No.	3 years. ²²²	N/A
Wyoming	"(1) An actor is subject to liability to another for battery if (a) he acts intending to cause a harmful or offensive contact with the person of the other or a third person, or an imminent apprehension of such a contact, and (b) an offensive contact with the person of the other directly or indirectly results." ²²³	Unclear.	Unclear.	No.	1 year. ²²⁴	N/A

¹ West Morgan-East Lawrence Water and Sewer Authority v. 3M Co., 208 F. Supp. 3d 1227, 1236 (N.D. Ala. 2016) (citing Ex parte Atmore Community Hosp., 719 So.2d 1190, 1193 (Ala. 1998)).

² *Id.* at 1236-1237 ("A plaintiff can establish 'intent' by showing that the defendant 'desires or is *substantially certain* of the injury to result from his or her act.'") (*quoting Ex parte Capstone Bldg. Corp.*, 96 So.3d 77, 96 (Ala. 2012) and finding that alleged awareness of release of PFOA and PFOS into water supply sufficed to allege intent by providing "a reasonable inference" that discharge was made with a substantial certainty that water would be used for drinking, without need to identify a specific intent to harm a particular individual).

³ *Id.* at 1236 (citing Harper v. Winston Co., 892 So.2d 346, 353 (Ala. 2004)).

⁴ Ex parte Capstone Bldg. Corp., 96 So.3d 77, 96 (Ala. 2012); Harper v. Winston Co., 892 So.2d 346, 353 (Ala. 2004).

⁵ Ala. Code § 6-2-34(1).

⁶ DeNardo v. Corneloup, 163 P.3d 956, 960 (Alaska 2007).

⁷ *Id.* (although noting it suffices for intent under Alaska law to intend to cause contact and is not necessary to intend to cause harm, the Alaska Supreme Court refused to deem general diffusion of smoke into plaintiff's apartment "intentional" without allegation of "deliberate" contact with the plaintiff).

⁸ *Id.* (finding no battery, the court did not decide whether smoke was sufficient for offensive contact or whether physical harm was required).

⁹ *Id*.

¹⁰ Alaska Stat. Ann. § 09.10.070(a).

¹¹ Alaska Stat. Ann. § 09.10.055.

¹² Ryan v. Napier, 425 P.3d 230, 235 (Ariz. 2018).

¹³ Id. ("[A] battery claim requires proof that the defendant intended to cause harmful or offensive contact with the plaintiff") (citation omitted).

¹⁴ Johnson v. Pankratz, 2 P.3d 621, 624 (Ariz. Ct. App. 2000) ("With an intentional tort such as battery, 'physical injury need not be sustained") (quoting Skousen v. Nidy, 367 P.2d 248, 250 (Ariz. 1961)).

¹⁵ Ryan, 425 P.3d 230.

¹⁶ Ariz. Rev. Stat. Ann. § 12-542(1).

¹⁷ Haley v. Elkins, 576 S.W.3d 111, 116 (Ark. Ct. App. 2019).

¹⁸ Id.; Mann v. Pierce, 505 S.W.3d 150, 154 (Ark. 2016) (battery requires showing the actor "acted with the intent to cause harmful contact ... and did so").

¹⁹ Arkansas courts do not appear to have addressed whether the "damages" caused by the contact must include physical injury; the Arkansas Supreme Court's statement that the actor must have "acted with the intent to cause *harmful* contact ... *and did so*," *Mann*, 505 S.W.3d 150, 154 (emphasis added) may suggest a requirement of physical harm, but may be specific to the facts of the case at bar.

²⁰ *Mann*, 505 S.W.3d 150.

²¹ Ark. Code Ann. § 16-56-104.

²² So v. Shin, 212 Cal. App. 4th 652, 659 (3d Dist. 2013).

²³ *Id.* (requiring not just the intent to cause the contact but the intent to harm or offend the plaintiff); *see also Barth v. Firestone Tire and Rubber Co.*, 673 F. Supp. 1466, 1475 (N.D. Cal. 1987) (defendant's alleged intentional mislabeling of containers of toxic substances and requirement that employees work with them do not constitute willful physical assault or battery because the acts were not undertaken "for the purpose of injuring the employee[s].")

²⁴ So v. Shin, 212 Cal. App. 4th at 659 (only issue before the court where an offensive touching was alleged was plaintiff's consent).

²⁵ Barth v. Firestone Tire and Rubber Co., 673 F. Supp. 1466 (N.D. Cal. 1987).

²⁶ Cal. Code Civ. P. § 335.1.

²⁷ White v. Muniz, 999 P.2d 814, 816 (Colo. 2000) (adopting Restatement (Second) of Torts definition).

²⁸ *Id.* at 819 ("With regard to the intent element of the intentional torts of assault and battery, we hold that ... a plaintiff must prove that the actor desired to cause offensive or harmful consequences by his act," and not merely to cause a contact that happened to be offensive or harmful).

²⁹ Whitley v. Andersen, 551 P.2d 1083, 1085 (Colo. Ct. App. 1976) ("One who intentionally inflicts upon another an offensive, although non-harmful, bodily contact, is liable therefor even though the act committed was not done with the intent to cause actual physical harm.")

³⁰ White, 999 P.2d 814.

³¹ Colo. Rev. Stat. Ann. § 13-80-102.

³² Maselli v. Regional Sch. Dist. No. 10, 235 A.3d 599, 660 (Conn. Ct. App. 2020).

³³ *Id.* "[A]n actionable assault and battery may be one committed wilfully or voluntarily, and therefore intentionally; one done under circumstances showing a reckless disregard of consequences; or one committed negligently.") (*quoting Markey v. Santangelo*, 195 Conn. 76, 78, 485 A.2d 1305 (1985)) ("Intentional conduct is, therefore, not always required for assault and battery").

³⁴ The elements of battery defined by Connecticut courts require an intent to cause either a "harmful or offensive contact" but require that a "harmful contact" results. It is not clear whether the exclusion of "offensive contact" from the resulting harm implies that a physical injury must result or whether other harm may include non-physical harms that extend beyond offense.

³⁵ *Vernon Village, Inc. v. Gottier*, 755 F. Supp. 1142, 1156 (D. Conn. 1990) (finding no intent, and therefore no battery, for presence of contaminants in drinking water without deciding whether presence of contaminants "could be characterized as a 'harmful contact").

³⁶ Markey, 485 A.2d 1305.

³⁷ Conn. Gen. Stat. Ann. § 52-577.

³⁸ Hunt ex rel. DeSombre v. State, Dep't of Safety and Homeland Sec., Div. of Del. State Police, 69 A.3d 360 (Del. 2013).

³⁹ *Id.* ("The intent necessary for battery is the intent to make contact with the person, not the intent to cause harm.")

⁴⁰ Brzoska v. Olson, 668 A.2d 1355, 1360 (Del. 1995) ("[T]he contact need not be harmful[;] it is sufficient if the contact offends the person's integrity," and a person need not know about the offensive nature of the contact until after the event).

 $^{^{41}}$ Id.

⁴² Del. Code Ann. Tit. 10, § 8119.

⁴³ Quilling v. Price, 894 So. 2d 1061, 1063 (Fla. Dist. Ct. App. 2005).

⁴⁴ Long v. Baker, 37 F. Supp. 3d 1243, 1252 n.8 (M.D. Fla. 2014) (the intent required for battery "is not necessarily a hostile intent, or a desire to do harm. Where a reasonable man would believe that a particular result was substantially certain to follow, he will be held in the eyes of the law as though he had intended it....

However, the knowledge and appreciation of a risk, short of substantial certainty, is not the equivalent of intent.") (*quoting Spivey v. Battaglia*, 258 So. 2d 815, 816-817 (Fla. 1972)).

- ⁴⁵ *Paul v. Holbrook*, 696 So. 2d 1311, 1312 (Fla. Dist. Ct. App. 1997) (following Prosser on Torts in noting that "the defendant is liable not only for contact which do actual harm, but also for those relatively trivial ones which are merely offensive and insulting").
- ⁴⁶ Spivey, 258 So. 2d 815.
- ⁴⁷ Fla. Stat. Ann. § 95.11(3)(o).
- ⁴⁸ Vasquez v. Smith, 576 S.E.2d 59, 62 (Ga. Ct. App. 2003).
- ⁴⁹ *Id.* at 61 ("any unlawful touching of a person's body, even though no physical injury ensues, violates a personal right and constitutes a physical injury to that person.")
- ⁵⁰ One Georgia court, which later vacated its judgment after reversal by the Georgia Supreme Court, determined that particulate matter was capable of causing contact sufficient for battery: *Richardson v. Hennly*, 434 S.E.2d 772, 775 (Ga. Ct. App. 1993), *reversed on other grounds by Richardson v. Hennly*, 444 S.E.2d 317 (Ga. 1994) (noting that pipe smoke "is capable of 'touching' or making contact with one's person in a number of ways").
- ⁵¹ Ga. Code Ann. § 9-3-33.
- ⁵² Adams v. Dole Food Co., Inc., 323 P.3d 122, 135 (Haw. Ct. App. 2014).
- ⁵³ *Id.* at 134-136 (allegations that defendants knew of the hazards of DBCP chemical but intentionally continued to use DBCP-containing products in operations involving plaintiffs sufficient for battery claim).
- ⁵⁴ *Id.* at 136 (contact with DBCP chemical sufficient for battery allegation).
- ⁵⁵ Haw. Rev. Stat. § 657-7.
- ⁵⁶ White v. Univ. of Idaho, 797 P.2d 108, 109 (Idaho 1990).
- ⁵⁷ *Id.* at 111 (agreeing with the Court of Appeals that "The intent element of the tort of battery does not require a desire or purpose to bring about a specific result or injury; it is satisfied if the actor's affirmative act causes an intended contact which is unpermitted and which is harmful or offensive").
- ⁵⁸ Neal v. Neal, 873 P.2d 871 (Idaho 1994) (reversing dismissal of battery claim where an offensive, but not harmful, contact was alleged).
- ⁵⁹ *Id.*; *White*, 797 P.2d 108.
- ⁶⁰ Idaho Code Ann. § 5-219(5).
- ⁶¹ Campbell v. A.C. Equipment Servs. Corp., Inc., 610 N.E.2d 745, 748 (Ill. App. Ct. 1993).
- ⁶² Glowacki v. Moldtronics, Inc., 636 N.E.2d 1138, 1141 (Ill. App. Ct. 1994) (dismissal appropriate where plaintiffs did not allege defendants were "specifically aware of the dangers of the various chemicals to which plaintiff allegedly was exposed or that they intentionally misrepresented these dangers to plaintiff"); Pechan v. DynaPro, Inc., 622 N.E.2d 108, 118-119 (Ill. App. Ct. 1993) (because "the act of smoking generally is not done with the intent of touching others with emitted smoke" and the plaintiff failed to allege that the smokers in her office "intended that she be exposed to their smoke, or that reasonable persons should have known that their smoke would" harm plaintiff, "the facts alleged in this case do not give rise to a battery.")
- ⁶³ Handley v. Unarco Indus., Inc., 463 N.E.2d 1011, 1023 (Ill. App. Ct. 1984) (allegations that employer intended asbestos to enter employees' lungs and bodies sufficient to allege battery); Pechan v. DynaPro, Inc., 622 N.E.2d at 118-119 (finding no battery from second-hand cigarette smoke, but "not holding that one can never be battered by secondhand smoke" and citing cases involving "unconsented touching" that involve contact with drugs or radioactive gases); see also Zurbriggen v. Twin Hill Acquisition Co., Inc., 455 F. Supp. 3d 702, 732 (N.D. Ill. 2020) (exposure to allegedly toxic fabric in uniforms sufficient for harmful or offensive contact).
- ⁶⁴ 735 Ill. Comp. Stat. § 5/13-202.
- 65 Baker v. Monsanto Co., 962 F. Supp. 1143, 1160 (S.D. Ind. 1997) (quoting Fields v. Cummins Empl. Fed'l Credit Union, 540 N.E.2d 631, 640 (Ind. Ct. App. 1989)).

- ⁶⁶ Mullins v. Parkview Hosp., Inc., 865 N.E.2d 608, 611 (Ind. 2007) (requiring not just that an actor intend a contact but that the actor intend that the contact be harmful or offensive); Baker, 962 F. Supp. at 1160-1161 (defendant's employee's awareness of plaintiff's exposure to PCB chemicals insufficient for battery where there was no evidence that defendant's employee knew PCBs could cause injury or intentionally concealed facts)
- ⁶⁷ Baker, 962 F. Supp. at 1160-1161 (assuming that contact with PCBs would suffice for battery while finding that there was no evidence of intent).
- ⁶⁸ Mullins, 865 N.E.2d 608.
- ⁶⁹ Ind. Code § 34-11-2-4(a)(1).
- ⁷⁰ Nelson v. Winnebago Indus., Inc., 619 N.W.2d 385, 388-389 (Iowa 2000).
- ⁷¹ *Id.* at 389 (battery "does not require a physical injury").
- ⁷² *Id*.
- ⁷³ Iowa Code Ann. § 614.1(2).
- ⁷⁴ Baska v. Scherzer, 156 P.3d 617, 622 (Kan. 2007).
- ⁷⁵ McElhaney v. Thomas, 405 P.3d 1214, 1221 (Kan. 2017) (requiring a specific intent to cause a harmful or offensive contact, not merely to cause a contact); but see Baska v. Scherzer, 156 P.3d at 626 (reversing the ruling below that "a defendant must have a specific intent to commit the battery on the plaintiff to be liable to the plaintiff for battery").
- ⁷⁶ McElhaney v. Thomas, 405 P.3d at 1220 (sufficient for battery where actor intends an offensive contact and an offensive contact results).
- ⁷⁷ *Id*.
- ⁷⁸ Kan. Stat. Ann. § 60-514.
- ⁷⁹ Kan. Stat. Ann. § 60-513(b).
- 80 Modern Holdings, LLC v. Corning Inc., 2015 WL 1481457, at *10 (E.D. Ky. Mar. 31, 2015) (citing Vitale v. Henchey, 24 S.W.3d 651, 657 (Ky. 2000)).
- ⁸¹ *Id.* at *11 (sufficient to show that defendant conducted its operations and used hazardous substances "with the purpose of releasing [particulate matter] into the surrounding community").
- 82 *Id.* at *10-*11.
- ⁸³ Ky. Rev. Stat. Ann. § 413.140(1)(a).
- 84 Swope v. Columbian Chem. Co., 281 F.3d 185, 195 (5th Cir. 2002) (citing Caudle v. Betts, 512 So.2d 389, 391 (La. 1987)).
- ⁸⁵ *Id.* at 201 (sufficient that defendant knew to a substantial certainty that harm to employees was substantially certain to follow from exposure to ozone, without a need to show the defendant "*desired* to do any harm or even that the defendant knew to a substantial certainty the *full extent* of the bodily harm that would result.") (emphasis in original).
- ⁸⁶ *McClain v. City of New Orleans*, 137 So. 3d 671, 678 (La. Ct. App. 2014) (contact with sprayed chemical sufficient for battery claim); *Swope*, 281 F.3d at 196 n.38 (collecting earlier Louisiana cases).
- 87 Fricke v. Owens-Corning Fiberglas Corp., 571 So. 2d 130, 132 (La. 1990).
- ⁸⁸ La. Civ. Code § 3492.
- ⁸⁹ Parker v. Dall-Leighton, 2018 WL 4604006, at *3 (D. Me. Sept. 25, 2018) (citing Wilson v. State, 268 A.2d 484, 486-487 (Me. 1970)).
- ⁹⁰ *Id.* ("[t]o act intentionally in tort is to act with substantial certainty as to the consequences of one's action") (*quoting Pattershall v. Jenness*, 485 A.2d 980, 984 (Me. 1984)).
- ⁹¹ *Id.* ("Though the [Maine] Law Court has never directly defined the term 'offensive contact,' it has indicated that" the term may be defined according to the Restatement (Second) of Torts, which defines offensive contact as contact that "offends a reasonable sense of personal dignity," and does not require physical harm.)
- ⁹² Pattershall, 485 A.2d 980.
- ⁹³ Me. Rev. Stat. Ann. Tit. 14 § 752.
- 94 Shaw v. Brown & Williamson Tobacco Corp., 973 F. Supp. 539, 547 (D. Md. 1997) (quoting Janelsins v. Button, 648 A.2d 1039 (Md. Ct. App. 1994)).

⁹⁶ *Id.* at 548 (assuming, without deciding, that secondhand smoke could "touch" plaintiffs).

- ⁹⁹ *Id.* (defendant had required intent for battery whether or not he "intended to cause the injuries that [plaintiff] sustained" or "understood the seriousness of his conduct and all the harm that might result from it").
- ¹⁰⁰ Sullivan v. H.P. Hood & Sons, Inc., 168 N.E.2d 80, 85 (Mass. 1960) (ingestion of mouse fecal matter in milk did not constitute a battery).
- ¹⁰¹ *Id.*; *Waters*, 591 N.E.2d 184.
- ¹⁰² Mass. Gen. Laws. Ann. Ch. 260, § 4.
- ¹⁰³ Espinoza v. Thomas, 472 N.W.2d 16, 21 (Mich. Ct. App. 1991).
- ¹⁰⁴ Rose v. Braciszewski, 2009 WL 3276431, at *5 (Mich. Ct. App. Oct. 13, 2009) (not requiring specific intent; "[t]he intent necessary to make out a battery is the intent to cause a harmful or offensive contact with another person, or knowing, with substantial certainty, that such contact would result.").
- ¹⁰⁵ Id. at *5 (smoke and fumes); see also McNaughton v. 3M Company et al., No. 18-00086-CZ at 4 (Mich. Cir. Ct. Dec. 6, 2019) (PFAS).
- ¹⁰⁶ Mich. Comp. Laws Ann. § 600.5805(3).
- ¹⁰⁷ Paradise v. City of Minneapolis, 297 N.W.2d 152, 154 (Minn. 1980).
- ¹⁰⁸ Werlein v. United States, 746 F. Supp. 887, 907 (D. Minn. 1990) (under Minnesota law, intent to cause a harmful or offensive contact, or knowledge that such contact is substantially certain to occur, suffice) (citing Schumann v. McGinn, 240 N.W.2d 525, 529-530 (Minn. 1976)) (finding that "dispos[al] of highly toxic substances into sandy ground directly above a regional aquifer" constitutes sufficient evidence that defendant "knew its conduct was substantially certain to cause an offensive or harmful contact").
- ¹⁰⁹ *Id.* (suggesting a prediction that under Minnesota law, exposure to toxic substances released into groundwater constitutes a harmful or offensive contact).
- ¹¹⁰ Schumann, 240 N.W.2d 525.
- ¹¹¹ Minn. Stat. § 541.07(1).
- ¹¹² J.R. ex rel. R.R. v. Malley, 62 So. 3d 902, 906 (Miss. 2011).
- ¹¹³ Franklin Corp. v. Tedford, 18 So. 3d 215, 238, 240 (Miss. 2009) (finding jury instruction that required only "belief that the consequences [of an action] were substantially certain to result from it" insufficient for intent).
- ¹¹⁴ *Id.* at 222 (exposure to toxic glue sufficient for battery).
- ¹¹⁵ *Id*.
- ¹¹⁶ Miss. Code Ann. § 15-1-35.
- ¹¹⁷ State ex rel. Halsey v. Phillips, 576 S.W.3d 177, 181n.5 (Mo. 2019).
- ¹¹⁸ Cooper v. Albacore Holdings, Inc., 204 S.W.3d 238, 246 (Mo. Ct. App. 2006) (offensive but not physically harmful touching sufficient).
- ¹¹⁹ Mo. Rev. Stat. § 516.140.
- ¹²⁰ Collins v. State, Dep't of Justice, Div. of Highway Patrol, 755 P.2d 1373, 1377 (Mont. 1988).
- ¹²¹ Schuster v. Yellowstone Cnty., 2014 WL 3909141, at *3 (Mont. 2014) ("A battery claim does not require a demonstration of damages, only a demonstration of contact that offends a reasonable sense of personal dignity").
- 122 *Id*.
- ¹²³ Mont. Code Ann. § 27-2-204(3).
- ¹²⁴ Schwan v. CNH Am. LLC, 2006 WL 1215395, at *31 (D. Neb. May 4, 2006) (citing Kant v. Altayar, 704 N.W.2d 537, 540 (Neb. 2005).

⁹⁵ *Id.* at 548 (finding that even under the "substantial certainty" test for intent, there was no claim for battery where the defendant did not know with substantial certainty that secondhand smoke "would touch any particular non-smoker. While it may have had knowledge that second-hand smoke would reach some non-smokers, the Court finds that such generalized knowledge is insufficient to satisfy the intent requirement for battery.")

⁹⁷ Md. Code Ann. Cts. & Jud. P. § 5-101.

⁹⁸ Waters v. Blackshear, 591 N.E.2d 184, 185 (Mass. 1992).

- ¹²⁶ *Id.* (finding allegation of contact with numerous waste chemicals sufficient for battery claim).
- ¹²⁷ Neb. Rev. Stat. Ann. § 25-207.
- ¹²⁸ Humboldt Gen. Hosp. v. Sixth Jud. Dist. Ct., 376 P.3d 167, 171 (Nev. 2016).
- ¹²⁹ Salazar v. Stubbs, 2018 WL 4177550, at *3 (Nev. Ct. App. Aug. 10, 2018) (unpublished) ("the intent necessary for a civil battery is the intent to do an act that causes harm, not the intent to cause the harm").
- ¹³⁰ Nev. Rev. Stat. Ann. § 11.190(4)(c).
- ¹³¹ Rand v. Town of Exeter, 976 F. Supp. 2d 65, 76 (D.N.H. 2013).
- ¹³² *Id.* (noting that "[t]he New Hampshire Supreme Court has not defined the elements of the common law intentional torts of assault or battery").
- ¹³³ N.H. Rev. Stat. Ann. § 508:4.
- ¹³⁴ Corradetti v. Sanitary Landfill, Inc., 912 F. Supp. 2d 156, 161 (D.N.J. 2012) (New Jersey law).
- ¹³⁵ *Id.* (dismissing battery claim in groundwater contamination case for failure to prove intent and rejecting plaintiffs' contention that "the level of intent required in a case such as this may be satisfied by the discharging of contaminants into the environment and failing to remediate such contaminants.")
- ¹³⁶ Smith v. Honeywell, 2011 WL 810065, at *4 (D.N.J. Feb. 28, 2011) (finding that alleging contact with chromium, COPR, and related wastes was sufficient to plead an offensive contact for purposes of battery).
- ¹³⁷ N.J. Stat. Ann. § 2A:14-2.
- ¹³⁸ Milliron v. Cnty. of San Juan, 384 P.3d 1089, 1095 (N.M. Ct. App. 2016).
- ¹³⁹ *Id.* ("The intent required to commit battery extends only to the physical touching at issue and not to the resulting harm," and assessing claim under the "substantial certainty" test as to intent); *California First Bank v. State*, 801 P.2d 646, 656 (Nev. 1990) (noting that "the term 'intent' also denotes 'that the actor believes that the consequences are substantially certain to result from [the action taken]' and that it is not necessary for intent to put a particular person at risk of harm).
- ¹⁴⁰ Bustos v. City of Clovis, 365 P.3d 67 (N.M. Ct. App. 2015) ("It is black-letter law that causing an offensive touching, even indirectly to another's clothing and not resulting in injury, is the tort of battery").
- ¹⁴¹ N.M. Stat. § 37-1-8.
- ¹⁴² Messina v. Matarasso, 284 A.D.2d 32, 34-35 (N.Y. App. Div. 2001).
- ¹⁴³ New York does not require specific intent to cause injury: *Id.* at 35 ("An action for battery may be sustained without a showing that the actor intended to cause injury as a result of the intended contact, but it is necessary to show that the intended contact was itself 'offensive,' i.e., wrongful under all the circumstances."). However, other cases do suggest a heightened intent showing for battery by emissions: *see Stanley v. Amalithone Realty, Inc.*, 921 N.Y.S.2d 491, 501 (N.Y. Supr. 2011) (no battery by cellular radiation where '[n]o deliberate act was taken by defendants to make contact with plaintiffs' person or property" despite knowledge of radio frequency emissions); *Major v. Astrazeneca, Inc.*, 2006 WL 2640622, at *20-*21 (N.D.N.Y. Sept. 13, 2006) (granting defendants summary judgment on battery claim and finding, under New York law, no intent to contact plaintiffs, even by transferred intent, where defendants disposed of wastes on plaintiffs' property, absent knowledge that the wastes would contact plaintiffs "by air, soil, or water").
- ¹⁴⁴ Corcoran v. N.Y. Power Auth., 935 F. Supp. 376, 387-388 (S.D.N.Y. 1996) (exposure to radiation sufficient for battery).
- ¹⁴⁵ N.Y. Civ. Prac. Law and Rules § 215(3).
- ¹⁴⁶ Dickens v. Puryear, 276 S.E.2d 325, 330 (N.C. 1981); accord Tuggles v. United States, 2019 WL 954978, at *8 (M.D.N.C. Feb. 27, 2019).
- ¹⁴⁷ Alford v. Catalytica Pharma., Inc., 564 S.E.2d 267, 270-271 (N.C. Ct. App. 2002), reversed on other grounds by Alford v. Catalytica Pharma., Inc., 577 S.E.2d 293 (N.C. 2003).

¹²⁵ *Id.* at *31-*32 (finding sufficient allegation of battery where plaintiffs claimed defendants intentionally discharged contaminants into water, soil, and air and into an unlined pond and pits in such a manner that they would migrate offsite into plaintiffs' water, soil, and air supply and plaintiffs would come into contact with them).

- ¹⁴⁸ Faircloth v. Duke Univ., 267 F. Supp. 2d 470, 476 (2003) ("assault or battery claims based on exposure to cigarette smoke definitely cannot be raised under North Carolina law absent physical injury"); McCracken v. Sloan, 252 S.E.2d 250, 252 (N.C. Ct. App. 1979) (same).
- ¹⁴⁹ N.C. Gen. Stat. Ann. § 1-52(19).
- ¹⁵⁰ N.C. Gen. Stat. Ann. § 1-52(16).
- ¹⁵¹ Wishnatsky v. Huey, 584 N.W.2d 859, 861 (N.D. Ct. App. 1998).
- ¹⁵² *Id.* at 861-862 (physical injury not required but brief bodily contact and "rude and abrupt manner" insufficient for offensive contact battery).
- ¹⁵³ N.D. Cent. Code § 28-01-18(1).
- ¹⁵⁴ Tichon v. Wright Tool & Forge, 974 N.E.2d 746, 749 (Ohio Ct. App. 2012).
- ¹⁵⁵ In re E.I. du Pont de Nemours & Co. C-8 Pers. Injury Litig., 2015 WL 4092866, at *14-*15 (S.D. Ohio July 6, 2015) (Ohio law requires only substantial certainty that defendant's act will bring about a harmful or offensive contact, and does not require actual purpose or that defendant's act will lead to such contact with a specific person).
- ¹⁵⁶ *Id.* at *14-16 (allowing battery claims to proceed in suit alleging PFOA contamination); *Leichtman v. WLW Jacor Commc'ns, Inc.*, 92 Ohio App. 3d 232, 235-36 (1994) (reversing dismissal of battery claim involving tobacco smoke intentionally blown in plaintiff's face).
- ¹⁵⁷ Ohio Rev. Code Ann. § 2305.111(B).
- ¹⁵⁸ Brown v. Ford, 905 P.2d 223, 229 n.34 (Okla. 1995); overruled on other grounds by Smith v. Pioneer Masonry, Inc., 226 P.3d 687 (Okla. 2009).
- ¹⁵⁹ O'Brien v. Berry, 370 P.3d 836, 841 (Okla. Ct. App. 2016) (noting that "[a] person intends to commit a battery if [he/she] acts for the purpose of making a [harmful/offensive] contact with another.")
- ¹⁶⁰ Brown, 905 P.2d at 230 (offensive touching sufficient for battery).
- 161 *Id*.
- ¹⁶² Okla. Stat. Ann. tit. 12 § 95(3).
- ¹⁶³ Doe 1 v. Lake Oswego Sch. Dist., 297 P.3d 1287, 1293 (Or. 2013).
- ¹⁶⁴ Ballard v. City of Albany, 191 P.3d 679 (Or. Ct. App. 2008) (battery is a "voluntary act that is intended to cause the resulting harmful or offensive contact.")
- ¹⁶⁵ Lake Oswego Sch. Dist., 297 P.3d at 1293 ("It is not necessary that the contact do actual physical harm—it is sufficient if the contact is offensive or insulting."); Gulden v. Crown Zellerbach Corp., 890 F.2d 195, 196-197 (9th Cir. 1989) (under Oregon law, contact with toxic levels of PCBs sufficient for battery).
- ¹⁶⁶ Lake Oswego Sch. Dist., 297 P.3d 1287.
- ¹⁶⁷ Or. Rev. Stat. § 12.110(1).
- ¹⁶⁸ Johnson v. Sunoco, Inc. (R&M), 2018 WL 925009, at *4 (E.D. Penn. Feb. 15, 2018) (quoting Levenson v. Souser, 557 A.2d 1081, 1088 (Pa. Super. Ct. 1989)).
- ¹⁶⁹ *Id.* (plaintiffs "sufficiently stated a claim of battery under Pennsylvania law" where they alleged defendant had placed benzene-containing products "into the stream of commerce knowing and intending that [plaintiff] and other similarly situated persons would come into contact with them and use them" and that benzene exposure could potentially lead to blood and bone marrow disorders, without alleging a specific intent to harm plaintiffs individually) (battery under Pennsylvania law does not require specific intent but rather intent "extends both to the desired consequences *and* to the consequences substantially certain to follow from the act") (emphasis added) (*quoting Field v. Phila. Elec. Co.*, 565 A.2d 1170, 1178 (Pa. Super. Ct. 1989)).
- ¹⁷⁰ *Id.* (contact with benzene-containing products sufficient for contact element of battery claim).
- ¹⁷¹ 42 Pa. Cons. Stat. Ann. § 5524.
- ¹⁷² Broadley v. State, 939 A.2d 1016, 1021 (R.I. 2008).
- ¹⁷³ Hennessey v. Pyne, 694 A.2d 691, 696 (R.I. 1997) (noting that intent to injure plaintiff is not necessary "in a situation in which a defendant willfully sets in motion a force that in its ordinary course causes the injury," but finding that wayward golf ball did not hit plaintiff "in its ordinary course").
- ¹⁷⁴ Rhode Island requires only "offensive contact" or "unconsented touching," not physical harm: *Broadley*, 939 A.2d at 1021.
- ¹⁷⁵ *Id*.
- ¹⁷⁶ R.I. Gen. Laws § 9-1-14(b).

- ¹⁷⁷ Mellen v. Lane, 659 S.E.2d 236, 244 (S.C. Ct. App. 2008) (quoting Smith v. Smith, 9 S.E.2d 584, 589 (S.C. 1940)).
- ¹⁷⁸ *Id.* at 245 ("In civil actions, the intent, while pertinent and relevant, is not an essential element" of assault and battery).
- ¹⁷⁹ *Id.* ("Physical injury is not an element of battery. While there must be a touching, any forcible contact, irrespective of its degree, will suffice.") (*citing Herring v. Lawrence Warehouse Co.*, 72 S.E.2d 453, 458 (S.C. 1952)).
- ¹⁸⁰ Smith, 9 S.E.2d 584; Herring, 72 S.E.2d 453.
- ¹⁸¹ S.C. Code Ann. § 15-3-530(5).
- ¹⁸² Frey v. Kouf, 484 N.W.2d 864, 867 (S.D. 1992).
- ¹⁸³ *Id.* ("In a battery cause of action, it is not necessary to prove the actor had a 'specific design' to cause bodily contact" or a "desire to do any harm"; intent may be inferred from actions taken with substantial certainty that contact will occur).
- 184 *Id*.
- ¹⁸⁵ S.D. Cod. Laws § 15-2-15(1).
- ¹⁸⁶ Brown v. Christian Bros. Univ., 428 S.W.3d 38, 57 (Tenn. Ct. App. 2013).
- ¹⁸⁷ Brown, 428 S.W.3d at 57 (sufficient to allege physical contact that is offensive in that it "infringes on a reasonable sense of personal dignity ordinarily respected in a civil society.")
- ¹⁸⁸ Tenn. Code Ann. § 28-3-104(a).
- ¹⁸⁹ Bailey v. C.S., 12 S.W.3d 159, 162 (Tex. Ct. App. 2000).
- ¹⁹⁰ Mo-Vac Serv. Co., Inc. v. Escobedo, 603 S.W.3d 119, 126-127 (Tex. 2020) (interpreting Restatement (Second) of Torts definition of intent for battery to require that "an actor's intent must be directed toward a particular contact or apprehension, not merely a possibility of some contact or apprehension. This specificity is to be expected for a tort that involves an actor and an identifiable victim.")
- ¹⁹¹ Sanchez v. Striever, 2020 WL 5637879, at *3 (Tex. Ct. App. Sept. 22, 2020) ("Personal indignity is the essence of an action for battery; and consequently the defendant is liable not only for contacts which do actual physical harm, but also for those which are offensive and insulting") (*quoting Fisher v. Carrousel Motor Hotel, Inc.*, 424 S.W.2d 627, 630 (Tex. 1967)).
- ¹⁹² *Tijerina v. Phillip Morris, Inc.*, 1996 WL 885617, at *6 (N.D. Tex. Oct. 8, 1996) (refusing to certify class where no evidence offered that a class of persons suffer harm, illness, or mental anguish because of exposure to toxic fibers in cigarette filters).
- ¹⁹³ Mo-Vac Serv. Co., 603 S.W.3d 119; Fisher, 424 S.W.2d 627.
- ¹⁹⁴ Tex. Civ. Prac. & Rem. Code § 16.003(a)
- ¹⁹⁵ Wagner v. State, 122 P.3d 599, 603 (Utah 2005) (following Second Restatement of Torts).
- ¹⁹⁶ *Id.* at 603-604 ("We hold that the actor need not intend that his contact be harmful or offensive in order to commit a battery so long as he deliberately made the contact and so long as that contact satisfies our legal test for what is harmful or offensive.")
- ¹⁹⁷ *Id*. at 609.
- ¹⁹⁸ *Id*.
- ¹⁹⁹ Utah Code Ann. § 78B-2-307.
- ²⁰⁰ Christman v. Davis, 889 A.2d 746, 749 (Vt. 2005). Vermont courts do not appear to have provided a fuller statement of the elements of battery, but the *Christman* court cites *Kent v. Katz*, 146 F. Supp. 450, 463 (D. Vt. 2001) (quoting the Restatement (Second) of Torts to the effect that "[a]n actor is subject to liability to another for battery if (a) he acts intending to cause a harmful or offensive contact with the person of the other or a third person, or an imminent apprehension of such a contact, and (b) a harmful contact with the person of the other directly results."
- ²⁰¹ See Wilson v. Smith, 477 A.2d 964, 965 (citing a case finding it "to be error to exclude evidence of acts which tended to show the 'purpose and design' of defendant in an action for assault, noting that "[t]hough relevant case law is sparse, the history of the intent element in Vermont is consistent with modern law on the subject," and holding that intent is an element of assault and battery).
- ²⁰² See Haverly v. Kaytec, Inc., 738 A.2d 86, 89-90 (Vt. 1999) (appearing to contemplate battery claim based only on offensive contact).

- ²⁰⁶ Adams v. Commonwealth, 534 S.E.2d 347, 350 (Va. Ct. App. 2000) (criminal battery) (finding it unnecessary for an unlawful touching to result in injury to the plaintiff) (intangible "substances" such as light and sound can result in battery if evidence shows "the substance made objectively offensive or forcible contact with the victim's person resulting in some manifestation of a physical consequence or corporeal hurt); Neurology Servs., 67 Va. Cir. at *9 (undisputed exposure to asbestos fibers a "touching").
- ²⁰⁷ Va. Code Ann. § 8.01-243(A).
- ²⁰⁸ Sutton v. Tacoma Sch. Dist. No. 10, 324 P.3d 763, 766 (Wash. Ct. App. 2014) (internal quotation marks omitted).
- ²⁰⁹ *Id.* ("For there to be intent to cause harmful or offensive contact, the act must be done for the purpose of causing the contact ... or with knowledge on the part of the actor that such contact ... is substantially certain to be produced. [T]he requisite intent for battery is the intent to cause the contact, not the intent to cause injury") (internal quotation marks omitted) (*citing Garratt v. Dailey*, 279 P.2d 1091 (1955)).
- ²¹⁰ *Id.* (finding claims of bodily contact and contact with spittle sufficed to allege battery, without claims of physical impairment).
- ²¹¹ Garratt, 279 P.2d 1091.
- ²¹² Wash. Rev. Code Ann. § 4.16.100(1).
- ²¹³ W. Va. Fire & Cas. Co. v. Stanley, 602 S.E.2d 483, 494 (W. Va. 2004) (quoting Restatement (Second) of Torts).
- ²¹⁴ In re E.I. du Pont de Nemours & Co. C-8 Pers. Injury Litig., 2015 WL 4092866, at *14-*15 (S.D. Ohio July 6, 2015) (West Virginia follows the Restatement (Second) of Torts definition of "intent," under which the act is intentional when the actor "believes that the consequences are substantially certain to result from it," and does not require substantial certainty of contact with a specific plaintiff) (emphasis in original) (citing Funeral Servs. by Gregory, Inc. v. Bluefield Cmty. Hosp., 413 S.E.2d 79 (W. Va. 1991), overruled on other grounds by Courtney v. Courtney, 437 S.E.2d 436 (1993)).
- ²¹⁵ McClenathan v. Rhone-Poulenc, Inc., 926 F. Supp. 1272, 1276 n.5 (S.D. W. Va. 1996) ("The Court is not prepared to extend the contours of this tort [battery] to hold the mere presence and resultant inhalation of chemicals in the air constitutes a "harmful or offensive contact" by the emitter."); accord Rhodes v. E.I. du Pont de Nemours and Co., 657 F. Supp. 2d 751, 773 (S.D. W. Va. 2009).
- ²¹⁶ Funeral Servs, 413 S.E.2d 79.
- ²¹⁷ W. Va. Code Ann. § 55-2-12(b).
- ²¹⁸ Lestina v. West Bend Mut. Ins. Co., 501 N.W.2d 28, 30 (Wis. 1993).
- ²¹⁹ Walters v. Soriano, 2005 WL 2665339, at *4 (Wis. Ct. App. Oct. 20, 2005) (unpublished) ("The torts of battery and assault require proof of intent. A battery claim requires proof that the defendant 'had the mental purpose to cause bodily harm ... or was aware that his or her conduct was practically certain to cause bodily harm"); but see Brabazon v. Joannes Bros. Co., 286 N.W. 21, 26 (Wis. 1939) (no battery where demonstration of "fly spray" chemical mixture caused plaintiff's allergic reaction, because no intent to do injury).
- ²²⁰ Becker v. Automatic Garage Door Co., 456 N.W. 2d 888, 891 (Wis. Ct. App. 1990) (unlawful touching "in an angry, revengeful, rude, or insolent manner" sufficient without physical impairment).
- ²²¹ Brabazon, 286 N.W. at 26 (assuming, without deciding, "fly spray" could be the medium of a battery).
- ²²² Wis. Stat. Ann. § 893.54(1m).
- ²²³ Wyoming courts do not appear to have formally defined the elements of battery. However, the Wyoming Supreme Court has acknowledged that allegations stating the elements required by the Restatement (Second) of Torts are well-pleaded: *Jung-Leonczynska v. Steup*, 782 P.2d 578, 583 (Wyo. 1989).
- ²²⁴ Wyo. Stat. Ann. § 1-3-105(a)(v)(B).

²⁰³ Vt. Stat. Ann. tit. 12 § 512(1).

²⁰⁴ Koffman v. Garnett, 574 S.E.2d 258, 261 (Va. 2003).

²⁰⁵ Neurology Servs., Inc. v. Fairfax Med. PWH, LLC, 67 Va. Cir. 1, *9 (2005) (no intent to batter through exposure to asbestos despite "knowledge of probable consequences").

Defendants' Appendix D Variation in Civil Conspiracy Law*

	Stand-Alone Claim	Elements	Unlawful Object Or Manner Required	Highest Court	Statute of Limitations	Statute Of Repose
Alabama	No. ¹	The combination of two or more persons to do (a) something that is unlawful, oppressive, or immoral; or (b) something that is not unlawful, oppressive, or immoral, by unlawful, oppressive, or immoral means; or (c) something that is unlawful, oppressive, or immoral, by unlawful, oppressive, or immoral means. ²	Only the manner must be unlawful. ³	Yes. ⁴	2 years. ⁵	20 years. ⁶
Alaska	N/A	 (1) Two or more persons; (2) an object to be accomplished; (3) a meeting of the minds on the object or course of action; (4) one or more unlawful overt acts; and (5) damages as a result of the overt act or acts.⁷ 	N/A	In part.8	2 years. ⁹	N/A
Arizona	No. ¹⁰	Two or more people must agree to accomplish an unlawful purpose or to accomplish a lawful object by unlawful means, causing damages. ¹¹	Only the manner must be unlawful. ¹²	Yes. ¹³	2 years. ¹⁴	N/A
Arkansas	No. ¹⁵	A combination of two or more persons to accomplish a purpose that is unlawful or oppressive or to accomplish some purpose, not in itself unlawful, oppressive or immoral, by unlawful, oppressive or immoral means, to the injury of another. ¹⁶	Only the manner must be unlawful. ¹⁷	Yes. ¹⁸	3 years. ¹⁹	N/A
California	No. ²⁰	The formation and operation of the conspiracy and damage resulting to plaintiff from an act or acts done in furtherance of the common design. ²¹	The object must be unlawful. ²²	Yes. ²³	2 years. ²⁴	N/A
Colorado	No. ²⁵	(1) Two or more persons; (2) an object to be accomplished; (3) a meeting of the minds on the object or course of action; (4) one or more unlawful overt acts; and (5) damages as the proximate result thereof. ²⁶	Only the manner must be unlawful. ²⁷	Yes. ²⁸	2 years. ²⁹	10 years. ³⁰

^{*} The analysis of state law in this document is preliminary and illustrative and should not be understood to represent the positions that Defendants will take on state law questions in this or any other case based a complete analysis of state law and the facts of particular claims.

	Stand-Alone Claim	Elements	Unlawful Object Or Manner Required	Highest Court	Statute of Limitations	Statute Of Repose
Connecticut	No. ³¹	(1) A combination between two or more persons, (2) to do a criminal or an unlawful act or a lawful act by criminal or unlawful means, (3) an act done by one or more of the conspirators pursuant to the scheme and in furtherance of the object, (4) which act results in damage to the plaintiff. ³²	Only the manner must be unlawful. ³³	Yes. ³⁴	2 years. ³⁵	N/A
Delaware	No. ³⁶	(1) A confederation or combination of two or more persons; Only the manner must be unlawful. ³⁸ Yes. ³⁹ and (3) Actual damage. ³⁷		2 years. ⁴⁰	N/A	
District of Columbia	No. ⁴¹	An agreement between two or more persons; (2) to articipate in an unlawful act, or in a lawful act in an unlawful manner; and (3) an injury caused by an unlawful vert act performed by one of the parties to the agreement by pursuant to, and in furtherance of, the common scheme. 42		Yes. ⁴⁴	3 years. ⁴⁵	N/A
Florida	No. ⁴⁶	(1) An agreement between two or more parties; (2) to do an unlawful act or to do a lawful act by unlawful means; (3) the doing of some overt act in pursuance of the conspiracy; and (4) damage to plaintiff as a result of the acts done under the conspiracy. ⁴⁷		Yes. ⁴⁹	4 years. ⁵⁰	12 years. ⁵¹
Georgia	No. ⁵²	A combination between two or more persons either to do some act which is a tort, or else to do some lawful act by methods which constitute a tort. ⁵³	Only the manner must be unlawful. ⁵⁴	Yes. ⁵⁵	2 years. ⁵⁶	10 years. ⁵⁷
Hawaii	No. ⁵⁸	In general, the common law tort of civil conspiracy has three elements: (1) the formation of a conspiracy; (2) wrongful conduct in furtherance of the conspiracy; and (3) damage. ⁵⁹		In part. ⁶⁰	2 years. ⁶¹	N/A
Idaho	No. ⁶²	An agreement between two or more to accomplish an unlawful objective or to accomplish a lawful objective in an unlawful manner. ⁶³			2 years. ⁶⁶	10 years. ⁶⁷
Illinois	No. ⁶⁸	A combination of two or more persons for the purpose of accomplishing by concerted action either an unlawful purpose or a lawful purpose by unlawful means. ⁶⁹	Only the manner must be unlawful. ⁷⁰	Yes. ⁷¹	2 years. ⁷²	N/A

	Stand-Alone Claim	Elements	Unlawful Object Or Manner Required	Highest Court	Statute of Limitations	Statute Of Repose
Indiana	No. ⁷³	A combination of two or more persons, by concerted action, to accomplish an unlawful purpose or to accomplish some purpose, not itself unlawful, by unlawful means. ⁷⁴	Only the manner must be unlawful. ⁷⁵	Yes. ⁷⁶	2 years. ⁷⁷	10 years. ⁷⁸
Iowa	No. ⁷⁹	An understanding between two or more parties to harm another combined with an act taken in furtherance of the conspiracy which cause injury. ⁸⁰	nother combined with an act taken in furtherance of the unlawful. ⁸¹		2 years. ⁸³	15 years. ⁸⁴
Kansas	No. ⁸⁵	1) Two or more persons; (2) an object to be accomplished; 3) a meeting of the minds in the object or course of action; 4) one or more unlawful overt acts; and (5) damages as the roximate result thereof. 86 Only the manner must be unlawful. 87		2 years. ⁸⁹	10 years. ⁹⁰	
Kentucky	No. ⁹¹	A corrupt or unlawful combination or agreement between two or more persons to do by concert of action an unlawful act, or to do a lawful act by unlawful means. ⁹²	o or more persons to do by concert of action an unlawful must be unlawful. ⁹³		1 year. ⁹⁵	5-8 years. ⁹⁶
Louisiana	No. ⁹⁷	He who conspires with another person to commit an intentional or willful act is answerable, in solido, with that person, for the damage caused by such act. 98	nal or willful act is answerable, in solido, with that must be unlawful. 99		1 year. ¹⁰¹	N/A
Maine	No. ¹⁰²	A conspiracy claim requires commission of an independently recognized tort. 103	N/A	Yes. ¹⁰⁴	6 years. ¹⁰⁵	N/A
Maryland	No. ¹⁰⁶	A combination of two or more persons by an agreement or understanding to accomplish an unlawful act or to use unlawful means to accomplish an unlawful act not in itself illegal, with the further requirement that the act or means employed must result in damages to the plaintiff. 107	Only the manner must be unlawful. 108	Yes. ¹⁰⁹	3 years. ¹¹⁰	N/A
Massachusetts	Yes. ¹¹¹	"Two kinds of civil conspiracy have been delineated in the decisions. The element of coercion has been required only if there was no independent basis for imposing tort liability—where the wrong was in the particular combination of the defendants rather than in the tortious nature of the underlying conduct. However, another form of civil conspiracy, reflected in the Restatement (Second) of Torts § 876 (1979), derives from 'concerted action,' whereby liability is imposed on one individual for the tort of another."	N/A	Yes. ¹¹³	3 years. ¹¹⁴	N/A

	Stand-Alone Claim	Elements	Unlawful Object Or Manner Required	Highest Court	Statute of Limitations	Statute Of Repose
Michigan	No. ¹¹⁵	A combination of two or more persons, by some concerted action, to accomplish a criminal or unlawful purpose, or to accomplish a purpose not unlawful by criminal or unlawful means. 116	Only the manner must be unlawful. 117	Yes. ¹¹⁸	3 years. ¹¹⁹	10 years. ¹²⁰
Minnesota	No. ¹²¹	A combination of persons to accomplish an unlawful purpose or a lawful purpose by unlawful means. 122 Only the manner must be unlawful. 123		Yes. ¹²⁴	6 years. 125	N/A
Mississippi	Yes. ¹²⁶	(1) An agreement between two or more persons, (2) to accomplish an unlawful purpose or a lawful purpose unlawfully, (3) an overt act in furtherance of the conspiracy, (4) and damages to the plaintiff as a proximate result. 127		3 years. ¹³⁰	N/A	
Missouri	No. ¹³¹	(1) Two or more persons; (2) with an unlawful objective; (3) after a meeting of the minds; (4) committed at least one act in furtherance of the conspiracy; and, (5) the plaintiff was thereby damaged. 132 Yes. 134 Yes. 134		5 years. ¹³⁵	N/A	
Montana	No. ¹³⁶	(1) Two or more persons; (2) an object to be accomplished; (3) a meeting of the minds on the object or course of action; (4) one or more unlawful overt acts; and (5) damages as the proximate result thereof. ¹³⁷	1) Two or more persons; (2) an object to be accomplished; 3) a meeting of the minds on the object or course of action; 4) one or more unlawful overt acts; and (5) damages as the		3 years. ¹⁴⁰	N/A
Nebraska	No. ¹⁴¹	A combination of two or more persons to accomplish by concerted action an unlawful or oppressive object, or a lawful object by unlawful or oppressive means. ¹⁴²	Only the manner must be unlawful. 143	Yes. ¹⁴⁴	4 years. ¹⁴⁵	10 years. ¹⁴⁶
Nevada	Yes. ¹⁴⁷	Two or more persons undertaking some concerted action with the intent to accomplish an unlawful objective for the purpose of harming another, and resulting damage. 148	with the intent to accomplish an unlawful objective for the unlawful. 149		2 years. ¹⁵¹	N/A
New Hampshire	No. ¹⁵²	(1) Two or more persons; (2) an object to be accomplished (i.e., an unlawful object to be achieved by lawful or unlawful means or a lawful object to be achieved by unlawful means); (3) an agreement on the object or course of action; (4) one or more unlawful overt acts; and (5) damages as the proximate result thereof. ¹⁵³	Only the manner must be unlawful. 154	Yes. ¹⁵⁵	3 years. ¹⁵⁶	N/A

	Stand-Alone Claim	Elements	Unlawful Object Or Manner Required	Highest Court	Statute of Limitations	Statute Of Repose
New Jersey	No. ¹⁵⁷	A combination of two or more persons acting in concert to commit an unlawful act, or to commit a lawful act by unlawful means, the principal element of which is an agreement between the parties to inflict a wrong against or injury upon another, and an overt act that results in damage. 158	Only the manner must be unlawful. 159	Yes. ¹⁶⁰	2 years. ¹⁶¹	N/A
New Mexico	No. ¹⁶²) That a conspiracy between two or more individuals cisted; (2) that specific wrongful acts were carried out by e defendants pursuant to the conspiracy; and (3) that the aintiff was damaged as a result of such acts. 163 Only the manner must be unlawful. 164 Test. 165		3 years. ¹⁶⁶	N/A	
New York	No. ¹⁶⁷	An agreement; (2) to participate in an unlawful act; (3) In injury caused by an unlawful overt act performed by one of the parties to the agreement; (4) which overt act was done cursuant to and in furtherance of the common scheme. The object must be unlawful. The object must b		Yes. ¹⁷⁰	3 years. ¹⁷¹	N/A
North Carolina	No. ¹⁷²	A combination of two or more persons acting in concert to commit an unlawful act or to commit a lawful act by unlawful means, the principal element of which is an agreement to inflict a wrong against or injury upon another, and an overt act that results in damage. 173	A combination of two or more persons acting in concert to commit an unlawful act or to commit a lawful act by unlawful means, the principal element of which is an agreement to inflict a wrong against or injury upon another,		3 years. ¹⁷⁶	6 years. ¹⁷⁷
North Dakota	No. ¹⁷⁸	A combination of two or more persons acting in concert to commit an unlawful act or to commit a lawful act by unlawful means, the principal element of which is an agreement between the parties to inflict a wrong against or injury upon another and an overt act that results in damages. 179		Yes. ¹⁸¹	6 years. ¹⁸²	N/A
Ohio	No. ¹⁸³	(1) A malicious combination, (2) involving two or more persons, (3) causing injury to person or property, and (4) the existence of an unlawful act independent from the conspiracy itself. ¹⁸⁴	ing injury to person or property, and (4) the must be unlawful. 185 nlawful act independent from the		2 years. ¹⁸⁷	N/A
Oklahoma	No. ¹⁸⁸	A combination of two or more persons to do an unlawful act, or to do a lawful act by unlawful means. 189	Only the manner must be unlawful. 190	Yes. ¹⁹¹	2 years. ¹⁹²	N/A

	Stand-Alone Claim	Elements	Unlawful Object Or Manner Required	Highest Court	Statute of Limitations	Statute Of Repose
Oregon	No. ¹⁹³	(1) Two or more persons; (2) an object to be accomplished; (3) a meeting of minds on the object or course of action; (4) one or more unlawful overt acts; and (5) damages as the proximate result thereof. 194	The object must be unlawful. 195	Yes. ¹⁹⁶	2 years. ¹⁹⁷	8 years. ¹⁹⁸
Pennsylvania	Yes. ¹⁹⁹	Two or more persons combining or agreeing with intent to do an unlawful act or to do an otherwise lawful act by unlawful means. Proof of malice, i.e., an intent to injure, is essential in proof of a conspiracy. ²⁰⁰	an unlawful act or to do an otherwise lawful act by lawful means. Proof of malice, i.e., an intent to injure, is		2 years. ²⁰³	N/A
Rhode Island	No. ²⁰⁴	vil conspiracy requires evidence of an unlawful enterprise, ecific intent to do something illegal or tortious, and a valid derlying intentional tort theory. 205		Yes. ²⁰⁷	3 years. ²⁰⁸	N/A
South Carolina	Yes. ²⁰⁹	combination of two or more persons joining for the urpose of injuring and causing special damage to the aintiff. ²¹⁰ The object must be unlawful. ²¹¹		Yes. ²¹²	3 years. ²¹³	N/A
South Dakota	No. ²¹⁴	(1) Two or more persons; (2) an object to be accomplished; (3) a meeting of the minds on the object or course of action to be taken; (4) the commission of one or more unlawful overt acts; and (5) damages as the proximate result of the conspiracy. ²¹⁵	Only the manner must be unlawful. ²¹⁶	Yes. ²¹⁷	3 years. ²¹⁸	N/A
Tennessee	No. ²¹⁹	A combination of two or more persons who, each having the intent and knowledge of the other's intent, accomplish by concert an unlawful purpose, or accomplish a lawful purpose by unlawful means, which results in damage to the plaintiff. ²²⁰	Only the manner must be unlawful. ²²¹	Yes. ²²²	1 year. ²²³	6-10 years. ²²⁴
Texas	No. ²²⁵	A civil conspiracy is a combination by two or more persons to accomplish an unlawful purpose or to accomplish a lawful purpose by unlawful means. ²²⁶	Only the manner must be unlawful. ²²⁷	Yes. ²²⁸	2 years. ²²⁹	15 years. ²³⁰
Utah	No. ²³¹	(1) A combination of two or more persons, (2) an object to be accomplished, (3) a meeting of the minds on the object or course of action, (4) one or more unlawful, overt acts, and (5) damages as a proximate result thereof. ²³²	Only the manner must be unlawful. ²³³	Yes. ²³⁴	4 years. ²³⁵	N/A

	Stand-Alone Claim	Elements	Unlawful Object Or Manner Required	Highest Court	Statute of Limitations	Statute Of Repose
Vermont	Undecided. ²³⁶	A combination of two or more persons to effect an illegal purpose, either by legal or illegal means, or to effect a legal purpose by illegal means. For a civil action, the plaintiff must be damaged by something done in furtherance of the agreement, and the thing done must be something unlawful in itself. ²³⁷	Only the manner must be unlawful. ²³⁸	Inconclusive- ly. ²³⁹	3 years. ²⁴⁰	N/A
Virginia	No. ²⁴¹	plaintiff must establish that at least one member of the nspiracy, in agreement with another member, committed act that was itself wrongful or tortious, and that such act maged the plaintiff. ²⁴² Only the manner must be unlawful. ²⁴³ Yes. ²⁴⁴ 2		2 years. ²⁴⁵	N/A	
Washington	No. ²⁴⁶	1) Two or more people combined to accomplish an nlawful purpose, or combined to accomplish a lawful purpose by unlawful means; and (2) the conspirators entered nto an agreement to accomplish the object of the onspiracy. ²⁴⁷		Yes. ²⁴⁹	3 years. ²⁵⁰	12 years. ²⁵¹
West Virginia	No. ²⁵²	A combination of two or more persons by concerted action to accomplish an unlawful purpose or to accomplish some purpose, not in itself unlawful, by unlawful means. The cause of action is not created by the conspiracy but by the wrongful acts done by the defendants to the injury of the plaintiff. ²⁵³	Only the manner must be unlawful. ²⁵⁴	Yes. ²⁵⁵	2 years. ²⁵⁶	N/A
Wisconsin	No. ²⁵⁷	(1) The formation and operation of the conspiracy; (2) the wrongful act or acts done pursuant thereto; and (3) the damage resulting from such act or acts. ²⁵⁸	Only the manner must be unlawful. ²⁵⁹	Yes. ²⁶⁰	3 years. ²⁶¹	N/A
Wyoming	No. ²⁶²	(1) Two or more persons; (2) an object to be accomplished; (3) a meeting of the minds in the object or course of action; (4) one or more unlawful overt acts; and (5) damages as the proximate cause thereof. ²⁶³	Only the manner must be unlawful. ²⁶⁴	Yes. ²⁶⁵	4 years. ²⁶⁶	N/A

¹ Ex parte Alabama Dep't of Transp., 764 So.2d 1263, 1271 (Ala.2000). ² Hooper v. Columbus Reg'l Healthcare Sys., Inc., 956 So. 2d 1135, 1141 (Ala. 2006). ³ Id.

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<sup>4</sup> Id.
<sup>5</sup> Ala. Stat. § 6-2-38(1).
<sup>6</sup> Ex parte Liberty Nat'l Life Ins. Co., 825 So. 2d 758, (2002).
<sup>7</sup> Davis v. King Craig Tr., 2017 WL 2209879, at *3 (Alaska May 17, 2017) (citing Morasch v. Hood, 232 Or. App. 392, 402, 222 P.3d 1125, 1131–32 (2009) (setting
forth elements).
<sup>8</sup> Davis, 2017 WL 2209879, at *3 (holding only that civil conspiracy requires "unlawful acts by two or more persons.").
<sup>9</sup> Ak. Stat. § 09.10.070.
10 Wells Fargo Bank v. Arizona Laborers, Teamsters & Cement Masons Local No. 395 Pension Tr. Fund, 38 P.3d 12, 36 (Ariz. 2002) ("In short, liability for civil
conspiracy requires that two or more individuals agree and thereupon accomplish an underlying tort which the alleged conspirators agreed to commit.").
<sup>11</sup> Id.
<sup>12</sup> Id.
<sup>13</sup> Id.
<sup>14</sup> Ariz. Rev. Stat. § 12-542.
<sup>15</sup> Chambers v. Stern, 64 S.W.3d 737, 743 (Ark. 2002).
<sup>16</sup> Id.
<sup>17</sup> Id.
<sup>18</sup> Id.
<sup>19</sup> Ark. Code Ann. § 16-56-105.
<sup>20</sup> Applied Equip. Corp. v. Litton Saudi Arabia Ltd., 869 P.2d 454, 457 (Cal. 1994).
<sup>21</sup> Id.
<sup>22</sup> Id.
^{23} Id.
<sup>24</sup> Cal. Code Civ. P. § 335.1.
<sup>25</sup> Jet Courier Serv., Inc. v. Mulei, 771 P.2d 486, 502 (Colo. 1989).
^{26} Id.
<sup>27</sup> Nelson v. Elway, 908 P.2d 102, 106 (Colo. 1995).
^{28} Id.
<sup>29</sup> Colo. Rev. Stat. Ann. § 13-80-101(1)(n)(1).
<sup>30</sup> Colo. Rev. Stat. Ann. § 13-21-403.
<sup>31</sup> Marshak v. Marshak, 628 A.2d 964, 970-71 (Conn. 1993), overruled on other grounds by State v. Vakilzaden, 742 A.2d 767 (Conn. 1999).
^{32} Id.
^{33} Id.
<sup>34</sup> Id.
<sup>35</sup> Conn. Gen. Stat. Ann. § 52-584.
<sup>36</sup> Nicolet, Inc. v. Nutt. 525 A.2d 146, 149–50 (Del. 1987).
<sup>37</sup> Id.
^{38} Id.
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³⁹ *Id*.

⁴⁰ Del. Code § 8119.

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<sup>41</sup> Griva v. Davison, 637 A.2d 830, 848 (D.C. 1994).
<sup>42</sup> Id.
<sup>43</sup> Id.
<sup>44</sup> Id.
<sup>45</sup> D.C. Code § 12-301.
<sup>46</sup> Philip Morris USA, Inc. v. Russo, 175 So. 3d 681, 686 n.9 (Fla. 2015).
<sup>47</sup> Id.
<sup>48</sup> Id.
<sup>49</sup> Id.
<sup>50</sup> Fla. Stat. Ann. § 95.11(3)(a).
<sup>51</sup> Fla. Stat. Ann. § 95.031.
<sup>52</sup> Metro Atlanta Task Force for the Homeless, Inc. v. Ichthus Cmtv. Tr., 780 S.E.2d 311, 317 (Ga. 2015).
<sup>53</sup> Id.
<sup>54</sup> Id.
<sup>55</sup> Id.
<sup>56</sup> O.C.G.A. § 9-3-33.
<sup>57</sup> O.C.G.A. § 51-1-11.
<sup>58</sup> Weinberg v. Mauch, 890 P.2d 277, 286 (Haw. 1995).
<sup>59</sup> Siu v. Alwis, 2009 WL 1789319, at *11 (D. Haw. June 18, 2009).
<sup>60</sup> Weinberg v. Mauch, 890 P.2d 277, 286 (Haw. 1995).
<sup>61</sup> Haw. Rev. Stat. § 657-7.
<sup>62</sup> McPheters v. Maile, 64 P.3d 317, 321 (Idaho 2003).
<sup>63</sup> Id.
<sup>64</sup> Id.
<sup>65</sup> Id.
<sup>66</sup> Idaho Code § 5-219(4).
<sup>67</sup> Idaho Code § 6-1403.
<sup>68</sup> McClure v. Owens Corning Fiberglas Corp., 720 N.E.2d 242, 258 (Ill. 1999).
<sup>69</sup> Id.
<sup>70</sup> Id.
<sup>71</sup> Id.
<sup>72</sup> 735 ILCS 5/13-202.
<sup>73</sup> Winkler v. V.G. Reed & Sons, Inc., 638 N.E.2d 1228, 1234 (Ind. 1994); Indianapolis Horse Patrol, Inc. v. Ward, 217 N.E.2d 626, 628 (Ind. 1966).
<sup>74</sup> Ward, 217 N.E.2d at 628.
<sup>75</sup> Id.
<sup>76</sup> Id.
<sup>77</sup> Ind. Code Ann. § 34-11-2-4.
<sup>78</sup> Ind. Code Ann. § 34-20-3-1.
<sup>79</sup> Anderson v. Anderson Tooling, Inc., 928 N.W.2d 821, 826 (Iowa 2019).
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<sup>80</sup> Id.
<sup>81</sup> Id.
<sup>82</sup> Id.
83 Iowa Code Ann. § 614.1(2).
<sup>84</sup> Iowa Code Ann. § 614.1.
85 State ex rel. Mays v. Ridenhour, 811 P.2d 1220, 1226 (Kan. 1991).
<sup>86</sup> Id.
<sup>87</sup> Id.
<sup>88</sup> Id.
<sup>89</sup> K.S.A. § 60-513.
<sup>90</sup> K.S.A. § 60-3303.
<sup>91</sup> Catholic Health Initiatives, Inc. v. Wells, 2018 WL 3798562, at *3 (Ky. Ct. App. Aug. 10, 2018) (citing Davenport's Adm'x v. Crummies Creek Coal Co., 184
S.W.2d 887, 888 (Ky. 1945)).
<sup>92</sup> Wells, 2018 WL 3798562, at *3 (quoting Smith v. Board of Education of Ludlow, 94 S.W.2d 321, 325 (Ky. 1936)).
^{93} Id.
94 Davenport's Adm'x, 184 S.W.2d at 888.
<sup>95</sup> K.R.S. § 413.140(1).
<sup>96</sup> K.R.S. § 411.310.
<sup>97</sup> Ross v. Conoco, Inc., 828 So. 2d 546, 552 (La. 2002).
98 La. Civ. Code Ann. art. 2324.
<sup>99</sup> Ross, 828 So. 2d at 552.
^{100} Id.
<sup>101</sup> La. Civ. Code Ann. art. 3492.
102 Potter. Prescott. Jamieson & Nelson, P.A. v. Campbell, 708 A.2d 283, 286 (Me. 1998).
<sup>103</sup> Id.
^{104} Id.
<sup>105</sup> Me. Rev. Stat. Ann. Tit. 14, § 753.
<sup>106</sup> Shenker v. Laureate Educ., Inc., 983 A.2d 408, 428 (Md. 2009).
<sup>107</sup> Id.
^{108} Id.
^{109} Id.
<sup>110</sup> Md. Jud. Proc. Art. § 5-101.
<sup>111</sup> Kurker v. Hill, 689 N.E.2d 833, 836 (Mass. App. 1998) (citations omitted).
^{112} Id.
113 Kyte v. Philip Morris Inc., 556 N.E.2d 1025, 1028 (Mass. 1990); Fleming v. Dane, 22 N.E.2d 609, 611 (Mass. 1939).
<sup>114</sup> Mass. Gen. L. Ch. 260, § 2A.
<sup>115</sup> Fenestra Inc. v. Gulf Am. Land Corp., 141 N.W.2d 36, 48 (Mich. 1966).
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¹¹⁶ *Id*. ¹¹⁷ *Id*.

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<sup>118</sup> Id.
<sup>119</sup> Mich. Comp. L. Ann. § 600.5805.
^{120} Id.
<sup>121</sup> Leiendecker v. Asian Women United of Minnesota, 848 N.W.2d 224, 228 n.2 (Minn. 2014).
<sup>122</sup> Hannon v. Sanner, 2008 WL 2492410, at *6 (Minn. Ct. App. June 24, 2008).
^{123} Id.
<sup>124</sup> Harding v. Ohio Cas. Ins. Co. of Hamilton, Ohio, 41 N.W.2d 818, 823 (Minn. 1950).
<sup>125</sup> Minn. Stat. Ann. § 541.05(1)(5).
<sup>126</sup> Rex Distrib. Co., Inc. v. Anheuser-Busch, LLC, 271 So. 3d 445, 455 (Miss. 2019) (holding that underlying wrong, not necessarily underlying tort, was necessary
to allege civil conspiracy).
<sup>127</sup> Id.
<sup>128</sup> Id.
<sup>129</sup> Id.
<sup>130</sup> Miss. Code Ann. § 15-1-49.
<sup>131</sup> Rice v. Hodapp, 919 S.W.2d 240, 245 (Mo. 1996).
^{132} Id.
<sup>133</sup> Id.
^{134} Id.
<sup>135</sup> Mo. Rev. Stat. § 516.120(4).
<sup>136</sup> Simmons Oil Corp. v. Holly Corp., 852 P.2d 523, 530 (Mont. 1993).
^{137} Id.
<sup>138</sup> Id.
<sup>139</sup> Id.
<sup>140</sup> Mont. Stat. § 27-2-204.
<sup>141</sup> Wiekhorst Bros. Excavating & Equip. Co. v. Ludewig. 529 N.W.2d 33, 39–40 (Neb. 1995).
<sup>142</sup> Id.
<sup>143</sup> Id.
^{144} Id.
<sup>145</sup> Neb. Rev. Stat. § 25-207.
<sup>146</sup> Neb. Rev. Stat. § 25-224.
<sup>147</sup> Guilfoyle v. Olde Monmouth Stock Transfer Co., 335 P.3d 190, 198 (Nev. 2014).
<sup>148</sup> Id.
<sup>149</sup> Id.
<sup>150</sup> Id.
<sup>151</sup> Nev. Rev. Stat. § 11.190(4)(e).
<sup>152</sup> In re Appeal of Armaganian, 784 A.2d 1185, 1189 (N.H. 2001).
^{153} Id.
<sup>154</sup> Id.
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¹⁵⁵ *Id*.

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<sup>156</sup> N.H. Rev. Stat. Ann. § 508:4(I).
<sup>157</sup> Banco Popular N. Am. v. Gandi. 876 A.2d 253, 263 (N.J. 2005).
^{158} Id.
<sup>159</sup> Id.
<sup>160</sup> Id.
<sup>161</sup> N.J. Stat. Ann. § 2A:14-2.
<sup>162</sup> Ettenson v. Burke. 17 P.3d 440, 445 (N.M. App. 2001).
<sup>163</sup> Id.
^{164} Id.
<sup>165</sup> Deflon v. Sawyers, 137 P.3d 577, 582 (N.M. 2006).
<sup>166</sup> N.M. Stat. Ann. § 37-1-8.
<sup>167</sup> Summit & Spitzer v. Lindner, 452 N.Y.S.2d 80, 93–94 (N.Y. App. Div. 1982); Cresser v. Am. Tobacco Co., 662 N.Y.S.2d 374, 378 (N.Y. Sup. Ct. 1997).
<sup>168</sup> Lindsay v. Lockwood, 625 N.Y.S.2d 393, 397 (N.Y. Sup. Ct. 1994).
^{169} Id.
<sup>170</sup> Bereswill v. Yablon, 160 N.E.2d 531, 533 (N.Y. 1959).
<sup>171</sup> N.Y. Civ. Prac. § 214.
<sup>172</sup> Henry v. Deen, 310 S.E.2d 326, 334 (N.C. 1984).
<sup>173</sup> Carson v. Moody, 394 S.E.2d 194, 198 (N.C. App. 1990).
^{174} Id.
<sup>175</sup> State ex rel. Cooper v. Ridgeway Brands Mfg., LLC, 666 S.E.2d 107, 115 (N.C. 2008).
<sup>176</sup> N.C. Gen. Stat. Ann. § 1-52.
<sup>177</sup> N.C. Gen. Stat. Ann. § 1-50(a).
<sup>178</sup> Hurt v. Freeland, 589 N.W.2d 551, 560 (N.D. 1999).
^{179} Id.
<sup>180</sup> Id.
<sup>181</sup> Id.
<sup>182</sup> N.D. Code § 28-01-16.
<sup>183</sup> Gibson v. City Yellow Cab Co., 2001 WL 123467, at *3 (Ohio App. Feb. 14, 2001).
^{184} Id.
<sup>185</sup> Id.
<sup>186</sup> Kenty v. Transamerica Premium Ins. Co., 650 N.E.2d 863, 866 (Ohio 1995).
<sup>187</sup> Oh. Rev. Code § 2305.10(A).
<sup>188</sup> Brock v. Thompson. 948 P.2d 279, 294 (Okla. 1998).
^{189} Id.
<sup>190</sup> Id.
<sup>191</sup> Id.
<sup>192</sup> Ok. Stat. Ann. Tit. 12, § 95.
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¹⁹³ Bonds v. Landers, 566 P.2d 513, 516 (Or. 1977).

¹⁹⁴ *Id*.

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<sup>195</sup> Id. ("The primary purpose of a conspiracy must be to cause injury to another.").
<sup>196</sup> Id.
<sup>197</sup> O.R.S. § 12.110(1).
<sup>198</sup> O.R.S. § 30.905(1).
<sup>199</sup> Skipworth by Williams v. Lead Indus. Ass'n. Inc., 690 A.2d 169, 174 (Pa. 1997).
^{200} Id.
<sup>201</sup> Id.
^{202} Id.
<sup>203</sup> Pa. Code § 5524(7).
<sup>204</sup> Vose v. City of Pawtucket, 2019 WL 3241134, at *2 (D.R.I. July 18, 2019).
^{205} Id.
<sup>206</sup> Id.
<sup>207</sup> Read & Lundy, Inc. v. Washington Tr. Co. of Westerly, 840 A.2d 1099, 1102 (R.I. 2004).
<sup>208</sup> R.I. Gen. L. § 9-1-14(b).
<sup>209</sup> Allegro, Inc. v. Scully, 791 S.E.2d 140, 144 (S.C. 2016).
^{210} Id.
<sup>211</sup> Id.
^{212} Id.
<sup>213</sup> S.C. Code § 15-3-530.
<sup>214</sup> Kirlin v. Halverson, 758 N.W.2d 436, 455 (S.D. 2008).
^{215} Id.
^{216} Id.
<sup>217</sup> Id.
<sup>218</sup> S.D. Code § 15-2-14.
<sup>219</sup> Clear Water Partners, LLC v. Benson, 2017 WL 376391, at *4 (Tenn. Ct. App. Jan. 26, 2017).
<sup>220</sup> Trau-Med of Am., Inc. v. Allstate Ins. Co., 71 S.W.3d 691, 703 (Tenn. 2002).
<sup>221</sup> Id.
<sup>222</sup> Id.
<sup>223</sup> Tenn. Code Ann. § 28-3-104(a)(1)(A).
<sup>224</sup> Tenn. Code Ann. § 29-28-103(a).
<sup>225</sup> Hart v. Moore, 952 S.W.2d 90, 98 (Tex. Ct. App.1997).
<sup>226</sup> Firestone Steel Prods. Co. v. Barajas, 927 S.W.2d 608, 614 (Tex. 1996).
<sup>227</sup> Id.
<sup>228</sup> Id.
<sup>229</sup> Tex. Civ. Prac. Code § 16.003.
<sup>230</sup> Tex. Civ. Prac. Code § 16.012.
<sup>231</sup> Estrada v. Mendoza, 275 P.3d 1024, 1029 (Utah App. 2012).
^{232} Id.
<sup>233</sup> Id.
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<sup>234</sup> Alta Indus. v. Hurst, 846 P.2d 1282, 1290 n.7 (Utah 1993).
<sup>235</sup> Utah Code § 78B-2-307.
<sup>236</sup> Davis v. Vile, 2003 WL 25746021, at *3 (Vt. Mar. 2003).
<sup>237</sup> Jenkins v. Miller, 2017 WL 4402431, at *10 (D. Vt. Sept. 29. 2017).
^{238} Id.
<sup>239</sup> Davis v. Vile, 2003 WL 25746021, at *3 (Vt. Mar. 2003).
<sup>240</sup> Vt. Stat. Tit. 12, § 512(4).
<sup>241</sup> Dunlap v. Cottman Transmission Sys., LLC, 754 S.E.2d 313, 317 (Va. 2014).
<sup>242</sup> L-3 Commc'ns Corp. v. Serco. Inc., 926 F.3d 85, 92 (4th Cir. 2019).
^{243} Id.
<sup>244</sup> Dunlap, 754 S.E.2d at 317.
<sup>245</sup> Va. Code § 8.01-243(A).
<sup>246</sup> Williams v. Geico Gen. Ins. Co., 2020 WL 6287270, at *5 (W.D. Wash. Oct. 27, 2020).
<sup>247</sup> Chambers Creek LLC v. Schmidt, 191 Wash. App. 1021 (2015).
^{248} Id.
<sup>249</sup> Corbit v. J. I. Case Co., 424 P.2d 290, 295 (Wash. 1967).
<sup>250</sup> R.C.W. § 4.16.080(2).
<sup>251</sup> R.C.W. § 7.72.060.
<sup>252</sup> Dunn v. Rockwell, 689 S.E.2d 255, 268 (W. Va. 2009).
^{253} Id.
^{254} Id.
^{255} Id.
<sup>256</sup> W. Va. Code § 55-2-12.
<sup>257</sup> Onderdonk v. Lamb. 255 N.W.2d 507, 510 (Wis. 1977).
^{258} Id.
<sup>259</sup> Id.
^{260} Id.
<sup>261</sup> Wisc. Stat. § 893.54(1m)(a).
<sup>262</sup> Action Snowmobile & RV, Inc. v. Most Wanted Performance, LLC, 423 P.3d 317, 324 (Wyo. 2018).
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263 Id.
 264 Id.
 265 Id.

²⁶⁶ Wy. Stat. § 1-3-105(a).

Defendants' Appendix E Variation in Alternative and Market Share Liability*

	Alternative Liability Recognized	State-Specific Variation	Highest Court	Market Share Liability Recognized	State-Specific Variation	Highest Court
Alabama	N/A	N/A	No.	No. ¹	N/A	No.
Alaska	N/A	N/A	No.	N/A	N/A	No.
Arizona	N/A	N/A	No.	No. ²	N/A	No.
Arkansas	No. ³	N/A	No.	No. ⁴	N/A	Yes. ⁵
California	Yes. ⁶	Rule established in <i>Summers v. Tice.</i> ⁷	Yes. ⁸	Yes, in certain cases. ⁹	Rule established in <i>Sindell v</i> . <i>Abbott Laboratories</i> . ¹⁰ Rejected in non-DES cases. ¹¹	Yes. ¹²
Colorado	N/A	N/A	No.	No. ¹³	N/A	No.
Connecticut	Yes. ¹⁴	Follows Summers. 15	Yes. ¹⁶	No. ¹⁷	N/A	No.
Delaware	No. ¹⁸	N/A	No.	No. ¹⁹	N/A	No.
District of Columbia	Yes. ²⁰	Follows Summers. ²¹	No.	No. ²²	N/A	Yes. ²³
Florida	No. ²⁴	N/A	Yes. ²⁵	Yes. ²⁶	As a prerequisite to its application, a plaintiff must show a genuine attempt to locate and to identify the manufacturer responsible for the injury. Application is limited to actions in negligence; it may not be used in conjunction with allegations of fraud, breach of warranty, or strict liability. ²⁷	Yes. ²⁸
Georgia	No. ²⁹	N/A	No.	No. ³⁰	N/A	No.

^{*} The analysis of state law in this document is preliminary and illustrative and should not be understood to represent the positions that Defendants will take on state law questions in this or any other case based a complete analysis of state law and the facts of particular claims.

	Alternative Liability Recognized	State-Specific Variation	Highest Court	Market Share Liability Recognized	State-Specific Variation	Highest Court Yes. 35	
Hawaii	Undecided. ³¹	N/A	Inconclusively. ³²	Yes. ³³	Follows Sindell. ³⁴		
Idaho	No. ³⁶	N/A	No.	No. ³⁷	N/A	No.	
Illinois	Yes. ³⁸	Follows Summers. ³⁹	No.	No. ⁴⁰	N/A	Yes. ⁴¹	
Indiana	No. ⁴²	N/A	No.	No. ⁴³	N/A	Yes. ⁴⁴	
Iowa	No. ⁴⁵	N/A	Yes. ⁴⁶	No. ⁴⁷	N/A	Yes. ⁴⁸	
Kansas	N/A	N/A	No.	N/A	N/A	No.	
Kentucky	No. ⁴⁹	N/A	No.	No. ⁵⁰	N/A	No.	
Louisiana	No. ⁵¹	N/A	No.	No. ⁵²	N/A	No.	
Maine	No. ⁵³	N/A	No.	No. ⁵⁴	N/A	No.	
Maryland	No. ⁵⁵	N/A	No.	No. ⁵⁶	N/A	Yes. ⁵⁷	
Massachusetts	Yes. ⁵⁸	Follows Summers. ⁵⁹	No.	No. ⁶⁰	N/A	Yes. ⁶¹	
Michigan	No. ⁶²	N/A	No.	No. ⁶³	N/A	No.	
Minnesota	No. ⁶⁴	N/A	No.	No. ⁶⁵	N/A	No.	
Mississippi	N/A	N/A	No.	N/A	N/A	No.	
Missouri	No. ⁶⁶	N/A	Yes. ⁶⁷	No. ⁶⁸	N/A	Yes. ⁶⁹	
Montana	N/A	N/A	No.	N/A	N/A	No.	
Nebraska	Yes. ⁷⁰ If all or substantially all of the available and identifiable manufacturers are before the court, and if some of these defendants can be shown to have each contributed some harm at a possibly substantial level, then all potential defendants need not be before the court. ⁷¹		No.	N/A	N/A	No.	
Nevada	N/A	N/A	No.	N/A	N/A	No.	

Alternative Liability Recognized		State-Specific Variation	Highest Court	Market Share Liability Recognized	State-Specific Variation	Highest Court	
New Hampshire	Undecided. ⁷²	N/A	Inconclusively. ⁷³	Yes. ⁷⁴	Follows Sindell. ⁷⁵	Yes. ⁷⁶	
New Jersey	Yes. ⁷⁷	Follows Summers. ⁷⁸	Yes. ⁷⁹	No. ⁸⁰	N/A	Yes. ⁸¹	
New Mexico	Yes.82	Follows Summers.83	No.	N/A	N/A	No.	
New York	Yes. ⁸⁴	Follows Summers.85	No.	Yes, in certain cases. ⁸⁶	Rejected in cases involving non-fungible products. ⁸⁷	Yes. ⁸⁸	
North Carolina	No. ⁸⁹	N/A	No.	No. ⁹⁰	N/A	No.	
North Dakota	Undecided.91	N/A	Inconclusively. ⁹²	Undecided. ⁹³	N/A	Inconclusively. ⁹⁴	
Ohio	Yes. ⁹⁵	Follows Summers. ⁹⁶	Yes. ⁹⁷	No. ⁹⁸	N/A	Yes. ⁹⁹	
Oklahoma	No. ¹⁰⁰	N/A	Yes. ¹⁰¹	No. ¹⁰²	N/A	Yes. ¹⁰³	
Oregon	No. ¹⁰⁴	N/A	Yes. ¹⁰⁵	No. ¹⁰⁶	N/A	Yes. ¹⁰⁷	
Pennsylvania	Yes. ¹⁰⁸	Follows Summers. 109	Yes. ¹¹⁰	No. ¹¹¹	N/A	Yes. ¹¹²	
Rhode Island	No. ¹¹³	N/A	Yes. ¹¹⁴	No. ¹¹⁵	N/A	Yes. ¹¹⁶	
South Carolina	No. ¹¹⁷	N/A	No.	No. ¹¹⁸	N/A	No.	
South Dakota	No. ¹¹⁹	N/A	Yes. ¹²⁰	N/A	N/A	No.	
Tennessee	No. ¹²¹	N/A	No.	No. ¹²²	N/A	No.	
Texas	No. ¹²³	N/A	Inconclusively. 124	Undecided. ¹²⁵	N/A	Inconclusively. 126	
Utah	N/A	N/A	No.	N/A	N/A	No.	
Vermont	N/A	N/A	No.	N/A	N/A	No.	
Virginia	N/A	N/A	No.	N/A	N/A	No.	
Washington	Yes. 127	Follows Summers. 128	Yes. ¹²⁹	Yes. ¹³⁰	Follows Sindell.	Yes. ¹³¹	
West Virginia	N/A	N/A	No.	N/A	N/A	No.	
Wisconsin	Yes. ¹³²	Follows Summers. 133	No	Yes, in part. ¹³⁴	Market share is a relevant factor in apportioning liability among defendants. 135	Yes. ¹³⁶	
Wyoming	N/A	N/A	No.	N/A	N/A	No.	

¹ Franklin County School Board v. Lake Asbestos of Quebec, Ltd., 1986 WL 69060 (N.D. Ala. Feb. 13, 1986).

² White v. Celotex Corp., 907 F.2d 104, 106 (9th Cir. 1990).

³ Jackson v. Anchor Packing Co., 994 F.2d 1295 (8th Cir. 1993).

⁴ Green v. Alpharma, Inc., 284 S.W.3d 29, 35-37 (Ark. 2008); Chavers v. Gen. Motors Corp., 79 S.W.3d 361, 367-78 (Ark. 2002); Jackson, 994 F.2d at 1303.

⁵ Green, 284 S.W.3d at 35-37.

⁶ Summers v. Tice, 199 P.2d 1 (Cal. 1948). But see Rutherford v. Owens-Illinois, Inc., 941 P.2d 1203, 1218 (Cal. 1997) (declining to extend to asbestos cases).

⁷ See Summers, 199 P.2d at 1.

⁸ Summers, 199 P.2d at 1; Rutherford, 941 P.2d at 1218.

⁹ Sindell v. Abbott Labs., 607 P.2d 924, 937 (Cal. 1980); Brown v. Super. Ct., 751 P.2d 470, 486 (Cal. 1988) ("It is apparent that the imposition of joint liability on defendants in a market share action would be inconsistent with this rationale. Any defendant could be held responsible for the entire judgment even though its market share may have been comparatively insignificant.").

¹⁰ Sindell, 607 P.2d at 937.

¹¹ Ferris v. Gatke Corp., 132 Cal. Rptr. 2d 819 (Cal. App. 2003).

 $^{^{12}}$ *Id*.

¹³ Merkley v. Pittsburgh Corning Corp., 910 P.2d 58, 59 (Colo. Ct. App. 1995).

¹⁴ Connecticut Interlocal Risk Mgmt. Agency v. Jackson, 214 A.3d 841, 846 (Conn. 2019).

¹⁵ *Id*.

¹⁶ *Id*.

¹⁷ Gullotta v. Eli Lilly & Co., 1985 WL 502793 (D. Conn. May 9, 1985).

¹⁸ Nutt v. A.C. & S., Inc., 517 A.2d 690, 694 (Del. Super. Ct. 1986).

¹⁹ In re Asbestos Litig., 509 A.2d 1116, 1118-19 (Del. Super. Ct. 1986), aff'd, Nicolet, Inc. v. Nutt, 525 A.2d 146, 150 (Del. 1987).

²⁰ Bowman v. Redding & Co., 449 F.2d 956, 967–68 (D.C. Cir. 1971).

²¹ *Id*.

²² Tidler v. Eli Lilly & Co., 851 F.2d 418, 424-25 (D.C. Cir. 1988); see also Claytor v. Owens- Corning Fiberglas Corp., 662 A.2d 1374, 1383 n.10 (D.C. 1995).

²³ Claytor, 662 A.2d at 1383 n.10.

²⁴ Conley v. Boyle Drug Co., 570 So. 2d 275, 279 (Fla. 1990); Vincent v. C.R. Bard, Inc., 944 So. 2d 1083, 1086 (Fla. Dist. Ct. App. 2006).

²⁵ Conley, 570 So. 2d at 279 (Fla. 1990).

 $^{^{26}}$ *Id*.

²⁷ *Id.* at 286.

²⁸ *Id*.

²⁹ Ga. Ct. App. §51-1-11(d); *Reid v. BMW of N. Am.*, 430 F. Supp. 2d 1365 (N.D. Ga. 2006); *Carmical v. Bell Helicopter Textron, Inc.*, 117 F.3d 490, 494 (11th Cir. 1997); *Talley v. City Tank Corp.*, 279 S.E.2d 264 (Ga. Ct. App. 1981).

³⁰ Ga. Ct. App. §51-1-11(d); *Reid*, 430 F. Supp. 2d at 1365; *Carmical*, 117 F.3d at 494; *Talley*, 279 S.E.2d at 264.

³¹ Smith v. Cutter Biological, Inc., a Div. of Miles Inc., 823 P.2d 717, 725 (Haw. 1991).

³² *Id.* ("We choose not to alter the theory to the point that it would be useful on the facts here.").

³⁴ *Id*.

³⁵ *Id*.

³⁶ *Doe v. Cutter Biological*, 852 F. Supp. 909 (D. Idaho 1994).

³⁷ *Id*.

³⁸ Wysocki v. Reed, 583 N.E.2d 1139 (Ill. App. Ct. 1991).

³⁹ *Id.* at 280.

⁴⁰ Smith v. Eli Lilly & Co., 560 N.E.2d 324 (Ill. 1990); Sparapany v. Rexall Corp., 618 N.E.2d 1098, 1099 (Ill. App. Ct. 1st Dist. 1993).

⁴¹ Smith, 560 N.E.2d at 324.

⁴² City of Gary ex rel. King v. Smith & Wesson Corp., 2001 WL 333111, at *5 (Ind. Super. Jan. 11, 2001).

⁴³ City of Gary v. Smith & Wesson, Corp., 801 N.E.2d 1222 (Ind. 2003); Harris v. AC & S, Inc., 915 F. Supp. 1420, 1437 (S.D. Ind. 1995).

⁴⁴ City of Gary, 801 N.E.2d at 1222.

⁴⁵ Mulcahy v. Eli Lilly & Co., 386 N.W.2d 67, 74 (Iowa 1986).

⁴⁶ *Id*.

⁴⁷ *Id.* at 74–76.

⁴⁸ *Id*.

⁴⁹ Farmer v. Newport, 748 S.W.2d 162 (Ky. Ct. App. 1988); see also Dawson v. Bristol Labs., 658 F. Supp. 1036 (W.D. Ky. 1987).

⁵⁰ Holbrook v. Rose, 458 S.W.2d 155 (Ky. Ct. App. 1970) (product must cause harm); Farmer, 748 S.W.2d at 162; see also Dawson, 658 F. Supp. at 1036.

⁵¹ Quick v. Murphy Oil Co., 643 So. 2d 1291, 1294 (La. App. 1994).

⁵² George v. Housing Auth. of New Orleans, 906 So. 2d 1282, 1287 (La. App. 2005); Jefferson v. Lead Indus. Ass'n, Inc., 106 F.3d 1245, 1247-48 (5th Cir. 1997); Thompson v. Johns- Manville Sales Corp., 714 F.2d 581, 583 (5th Cir. 1983).

⁵³ Kinnett v. Mass Gas & Electric Supply Co., 716 F. Supp. 695 (D.N.H. 1989) (applying Maine law).

⁵⁴ *Id*.

⁵⁵ Thodos v. Bland, 542 A.2d 1307, 1315 (Md. App. 1988).

⁵⁶ Reiter v. Pneumo Abex, LLC, 8 A.3d 725, 730 (Md. 2010).

⁵⁷ *Id*.

⁵⁸ Russo v. Material Handling Specialities Co., 1995 WL 1146853, at *8 (Mass. Super. Aug. 29, 1995).

⁵⁹ *Id*.

⁶⁰ Payton v. Abbott Labs, 437 N.E.2d 171 (Mass. 1982).

⁶¹ *Id*.

62 Napier v. Osmose, Inc., 399 F. Supp. 2d 811, 820 (W.D. Mich. 2005).

63 Marshall v. Celotex Corp., 651 F. Supp. 389, 391 (E.D. Mich. 1987).

⁶⁴ Leuer v. Johnson, 450 N.W.2d 363 (Minn. Ct. App. 1990).

65 Id.; see also Souder v. Owens-Corning Fiberglas Corp., 939 F.2d 647, 650 (8th Cir. 1991); Bixler v. Avondale Mills, 405 N.W.2d 428 (Minn. App. 1987).

⁶⁶ Zafft v. Eli Lilly Co., 676 S.W.2d 241 (Mo. 1984).

⁶⁷ *Id*.

⁶⁸ Id.; City of St. Louis v. Benjamin Moore & Co., 226 S.W.3d 110 (Mo. 2007).

³³ *Id.* at 728-29 ("In conclusion, we will recognize the basic market share theory of multi-tortfeasor liability, as defined herein. Acknowledging that this could open a Pandora's box of questions, . . . we recognize that our opinion is limited to the facts presented to us, and we reserve the right to modify or amend our answers to these questions.").

- ⁶⁹ Zafft, 676 S.W.2d at 241; City of St. Louis, 226 S.W.3d at 110.
- ⁷⁰ *Menne v. Celotex Corp.*, 861 F.2d 1453 (10th Cir. 1988) (applying Nebraska law).
- ⁷¹ *Id.* at 1466.
- ⁷² State v. Exxon Mobil Corporation, 126 A.3d 266, 296 (N.H. 2015) (describing market share as an "alternative liability theory").
- 73 *Id*.
- ⁷⁴ *Id.* at 298.
- ⁷⁵ *Id*.
- ⁷⁶ *Id*.
- ⁷⁷ Estate of Chin ex rel. Chin v. St. Barnabas Medical Center, 734 A.2d 778, 783 (N.J. 1999).
- 78 *Id*.
- ⁷⁹ *Id*.
- ⁸⁰ Shackil v. Lederle Labs., a Div. of Am. Cyanamid Co., 561 A.2d 511 (N.J. 1989).
- ⁸¹ *Id*.
- 82 Roderick v. Lake, 778 P.2d 443, 448 (N.M. App. 2008), abrogated on other grounds by Heath v. La Mariana Apartments, 180 P.3d 664 (N.M. 2008).
- 83 *Id*.
- ⁸⁴ Silver v. Sportsstuff, Inc., 14 N.Y.S.3d 421, 424-25 (N.Y. App. Div. 2015).
- ⁸⁵ *Id*.
- ⁸⁶ Compare Hymowitz v. Eli Lilly & Co., 539 N.E.2d 1069, 1078 (N.Y. 1989), cert. denied, 493 U.S. 944 (1989)) ("Consequently, for essentially practical reasons, we adopt a market share theory using a national market.") with S.F. v. Archer Daniels Midland Co., 594 F. App'x 11, 13 (2d Cir. 2014) ("[A]ll of S.F.'s claims rely on 'market-share liability theory,' and we reject its application to this case.").
- ⁸⁷ Archer Daniels, 594 F. App'x at 13.
- ⁸⁸ *Hymowitz*, 539 N.E.2d at 1078.
- 89 Griffin v. Tenneco Resins, Inc., 648 F. Supp. 964, 966–67 (W.D.N.C. 1986).
- ⁹⁰ *Id*.
- ⁹¹ Black v. Abex Corp., 603 N.W.2d 182, 191 (N.D. 1999) ("This Court has not previously addressed whether alternative liability . . . is recognized under North Dakota law. . . . We find it unnecessary to resolve this general issue because we conclude, assuming alternative liability were recognized in this state, summary judgment was appropriate under the facts of this case.").
- 92 *Id*.
- ⁹³ *Id.* at 199 ("This Court has never addressed whether market share liability is recognized under North Dakota tort law.... We find it unnecessary to resolve this general issue because we conclude, assuming market share liability were recognized in this state, summary judgment was still appropriate based upon the record in this case.").
- ⁹⁴ *Id*.
- ⁹⁵ Minnich v. Ashland Oil Co., 473 N.E.2d 1199, 1200 (Ohio 1984). But see Ohio R.C. § 2307.73(c) (rejecting "market share, enterprise, or industrywide liability" for product liability actions).
- 96 *Id*.
- ⁹⁷ *Id*.
- 98 Sutowski v. Eli Lilly & Co., 696 N.E.2d 187, 188 (Ohio 1998); see also Jackson v. Glidden Co., 2007 WL 184662, at *2 (Ohio Ct. App. Jan. 25, 2007); Ohio R.C. § 2307.73(c).
- ⁹⁹ Sutowski, 696 N.E.2d at 188.

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<sup>100</sup> Case v. Fibreboard Corp., 743 P.2d 1062, 1067 (Okla. 1987).
^{101} Id.
^{102} Id.
^{103} Id.
<sup>104</sup> Senn v. Merrell-Dow Pharms., Inc., 751 P.2d 215 (Or. 1988).
<sup>105</sup> Id. at 223.
^{106} Id.
<sup>107</sup> Id.
<sup>108</sup> Snoparsky v. Baer. 266 A.2d 707, 709 (Pa. 1970).
<sup>109</sup> Id.
<sup>110</sup> Id.
<sup>111</sup> Skipworth by Williams v. Lead Indus. Ass'n., 690 A.2d 169, 172 (Pa. 1997).
^{112} Id
<sup>113</sup> Almonte v. Kurl, 46 A.3d 1, 24 (R.I. 2012).
<sup>114</sup> Id.
<sup>115</sup> Gorman v. Abbott Labs.. 599 A.2d 1364 (R.I. 1991); see also Clift v. Vose Hardware, Inc., 848 A.2d 1130 (R.I. 2004).
<sup>116</sup> Gorman, 599 A.2d at 1364.
<sup>117</sup> Ryan v. Eli Lilly & Co., 514 F. Supp. 1004, 1015–19 (D.S.C. 1981).
^{118} Id.
119 Jorgensen Farms, Inc. v. Country Pride Corp., 824 N.W.2d 410, 416 (S.D. 2012).
<sup>121</sup> Davis v. Yearwood, 612 S.W.2d 917, 918 (Tenn. Ct. App. 1980).
<sup>122</sup> Id.
123 Hicks v. Charles Pfizer & Co., 466 F. Supp.2d 799, 804 (E.D. Tex. 2005).
<sup>124</sup> Gaulding v, Celotex Corp., 772 S.W.2d 66, 71 (Tex. 1989) ("We are not to be construed as approving or disapproving alternative liability, concert of action,
enterprise liability, or market share liability in an appropriate case. We do, however, hold that these theories do not apply to the facts of this case.").
<sup>125</sup> Id.
^{126} Id.
<sup>127</sup> Martin v. Abbott Labs., 689 P.2d 368, 375 (Wash. 1984).
^{128} Id.
<sup>129</sup> Id.
130 Id. at 383 ("As will be demonstrated, a particular defendant's potential liability is proportional to the probability that it caused plaintiff's injury."); George v.
Parke-Davis, 733 P.2d 507, 513-16 (Wash. 1987).
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Fiumefreddo v. McLean, 496 N.W.2d 226, 231 (Wisc. App. 1993).

133 Id.

134 Collins v. Eli Lilly Co., 342 N.W.2d 37, 49 (Wis. 1984) ("We emphasize, however, that we do not totally reject the market share theory. Rather, as we explain

¹³¹ Martin, 689 P.2d at 382-83; George, 733 P.2d at 513–16.

¹³⁴ Collins v. Eli Lilly Co., 342 N.W.2d 37, 49 (Wis. 1984) ("We emphasize, however, that we do not totally reject the market share theory. Rather, as we explain below, we consider market share, if determinable, to be a relevant factor in apportioning liability among defendants.") (now subject to 2011 Wis. Act. 2, §30 (codified at Wis. Stat. §895.046)).

¹³⁵ *Id*. ¹³⁶ *Id*.

Defendants' Appendix F Variation in Product Liability Act Preemption*

	Product Liability Act	Exclusive Remedy	Adds Elements Or Defenses	High Court Ruling On Exclusivity
Alabama	Yes. ¹	No. ²	Restricts the assertion of claims against distributors. ³	Yes. ⁴
Alaska	No.	N/A	N/A	N/A
Arizona	Yes. ⁵	No. ⁶	Adds affirmative defenses. ⁷	Yes. ⁸
Arkansas	Yes. ⁹	Probably. ¹⁰	No.	No.
California	Partial. ¹¹	N/A. ¹²	Provides immunity to certain manufacturers of common consumer products known to be "inherently unsafe." ¹³	N/A
Colorado	Yes. ¹⁴	Probably not. ¹⁵	Restricts the assertion of claims against non-manufacturer sellers. ¹⁶	No.
Connecticut	Yes. ¹⁷	Yes. ¹⁸	Restricts the assertion of claims in cases of alteration of the product. ¹⁹	Yes. ²⁰
Delaware	No.	N/A	N/A	N/A
Florida	No.	N/A	N/A	N/A
Georgia	Partial. ²¹	N/A	Restricts the assertion of claims against non-manufacturer sellers. ²²	N/A
Hawaii	No.	N/A	N/A	N/A
Idaho	Yes. ²³	Unclear. ²⁴	Restricts the assertion of claims against non-manufacturer sellers. ²⁵	No.
Illinois	No.	N/A	N/A	N/A
Indiana	Yes. ²⁶	Yes. ²⁷	Adds affirmative defenses. ²⁸	Yes. ²⁹
Iowa	Partial. ³⁰	N/A	Limits the liability of non-manufacturer sellers. ³¹	N/A
Kansas	Yes. ³²	Probably not. ³³	Restricts the assertion of claims against non-manufacturer sellers. ³⁴	No.
Kentucky	Yes. ³⁵	Yes. ³⁶	Restricts the assertion of claims against non-manufacturer sellers. ³⁷	Yes. ³⁸
Louisiana	Yes. ³⁹	Yes. ⁴⁰	Specifies the elements of an "unreasonably dangerous" product. ⁴¹	Yes. ⁴²
Maine	No.	N/A	N/A	N/A

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^{*} The analysis of state law in this document is preliminary and illustrative and should not be understood to represent the positions that Defendants will take on state law questions in this or any other case based a complete analysis of state law and the facts of particular claims.

	Product Liability Act	Exclusive Remedy	Adds Elements Or Defenses	High Court Ruling On Exclusivity
Maryland	No.	N/A	N/A	N/A
Massachusetts	No.	N/A	N/A	N/A
Michigan	Yes. ⁴³	Unclear.44	Specifies additional elements and defenses. ⁴⁵	No.
Minnesota	Partial.46	N/A	Limits the liability of non-manufacturer sellers. ⁴⁷	N/A
Mississippi	Yes. ⁴⁸	Probably. ⁴⁹	Specifies additional elements and defenses. ⁵⁰	Dicta only. ⁵¹
Missouri	Yes. ⁵²	No. ⁵³	Permits dismissal of non-manufacturer sellers in the stream of commerce ⁵⁴ ; alters affirmative defenses. ⁵⁵	No.
Montana	Yes. ⁵⁶	Unclear. ⁵⁷	Specifies additional elements and defenses. ⁵⁸	No.
Nebraska	Yes. ⁵⁹	Unclear. ⁶⁰	Eliminates strict liability claims against non-manufacturer sellers ⁶¹ ; provides defenses. ⁶²	No.
Nevada	No.	N/A	N/A	N/A
New Hampshire	No.	N/A	N/A	N/A
New Jersey	Yes. ⁶³	No. ⁶⁴	Specifies additional elements and defenses. ⁶⁵	Yes. ⁶⁶
New Mexico	No.	N/A	N/A	N/A
New York	No.	N/A	N/A	N/A
North Carolina	Yes. ⁶⁷	No. ⁶⁸	Specifies additional elements and defenses. ⁶⁹	Yes. ⁷⁰
North Dakota	Yes. ⁷¹	Unclear. ⁷²	Specifies additional elements and defenses, and restrict claims against non-manufacturer sellers. 73	No.
Ohio	Yes. ⁷⁴	Yes. ⁷⁵	Specifies additional elements and defenses. ⁷⁶	Yes. ⁷⁷
Oklahoma	Partial. ⁷⁸	N/A	Provides affirmative defenses and rebuttable presumptions. ⁷⁹	No.
Oregon	Yes. ⁸⁰	Yes. ⁸¹	Specifies additional elements and defenses. ⁸²	No.
Pennsylvania	No.	N/A	N/A	N/A
Rhode Island	No.	N/A	N/A	N/A
South Carolina	Yes. ⁸³	Unclear.84	Adds an affirmative defense ⁸⁵ and elements to be proved in actions involving firearms or ammunition. ⁸⁶	No.
South Dakota	Partial.87	N/A	Adds defenses. ⁸⁸	N/A

	Product Liability Act	Exclusive Remedy	Adds Elements Or Defenses	High Court Ruling On Exclusivity
Tennessee	Yes. ⁸⁹	Yes. ⁹⁰	Specifies additional elements and defenses. ⁹¹	No.
Texas	Yes. ⁹²	Unclear. ⁹³	Specifies additional elements and defenses. ⁹⁴	No.
Utah	Yes. ⁹⁵	No. ⁹⁶	None.	Yes. ⁹⁷
Vermont	No.	N/A	N/A	N/A
Virginia	No.	N/A	N/A	N/A
Washington	Yes. ⁹⁸	Yes. ⁹⁹	Specifies additional elements and defenses. ¹⁰⁰	Yes. ¹⁰¹
West Virginia	No.	N/A	N/A	N/A
Wisconsin	Yes. ¹⁰²	Unclear. ¹⁰³	Alters the elements of a strict products liability claim and adds a defense. ¹⁰⁴	No.
Wyoming	No.	N/A	N/A	N/A

¹ Ala. Code § 6-5-500 et seq.

² DISA Industries, Inc. v. Bell, 272 So. 3d 142, 144 n.1 (Ala. 2018) (citing Tillman v. R.J. Reynolds Tobacco Co., 871 So.2d 28, 35 (Ala. 2003) (Alabama Extended Manufacturer's Liability Doctrine does not subsume common-law claims).

³ Ala. Code § 6-5-521(b)-(c).

⁴ *DISA Industries*, 272 So. 3d 142.

⁵ Ariz. Rev. Stat. § 12-681 et seq.

⁶ *Torres v. Goodyear Tire & Rubber Co., Inc.*, 786 P.2d 939, 947 (Ariz. 1990) (Arizona product liability "statutes expressly disclaim any limitation of the existing common law of product liability. See A.R.S. § 12–682. Nor do the statutes attempt to oust this court from the evolution of product liability law."); Ariz. Rev. Stat. § 12-682 provides that "[t]he previously existing common law of products liability is modified only to the extent specifically stated in this article and § 12-551." Ariz. Rev. Stat. § 12-683.

⁸ Torres, 786 P.2d 939.

⁹ Ark. Code § 16-116-201 et seq.

¹⁰ Fields v. Wyeth, Inc., 613 F. Supp. 2d 1056, 1059 (W.D. Ark. 2009) (treating claims for "strict products liability, negligence, fraudulent misrepresentation, negligent misrepresentation, fraudulent concealment, and breach of implied warranties" as products liability actions under the Arkansas PLA and citing *Nationwide Rentals Co., Inc. v. Carter*, 765 S.W.2d 97, 101 (Ark. 1989) ("More than one theory of liability is permissible in a products liability claim"). ¹¹ Cal. Civ. Code § 1714.45.

¹² Cal. Civ. Code § 1714.45 is not a full product liability act and by its terms "is intended to be declarative of and does not alter or amend existing California law." Cal. Civ. Code § 1714.45(d).

 $^{^{13}}$ *Id*.

¹⁴ Colo. Rev. Stat. § 13-21-401 et seq.

¹⁵ Carter v. Brighton Ford, Inc., 251 P.3d 1179, 1187 (Colo. Ct. App. 2010) (rejecting a reading of § 13-21-402 "to be a general bar of any claim based on strict liability, negligence, contract, or warranty" and finding that "product liability actions are those tort actions which seek damages for injuries and collateral damage caused by defective products" and not breach of warranty or other actions sounding in contract for economic loss to the product, which are not covered by the statute).

¹⁶ Colo. Rev. Stat. § 13-21-402.

¹⁷ Conn. Gen. Stat. Ann. § 52-572m et seq.

¹⁸ Winslow v. Lewis-Shepard, Inc., 562 A.2d 517, 517 (Conn. 1989) (holding that the Conn. PLA "provides the exclusive remedy for a claim falling within its scope"); see also Collazo v. Nutribullet, 2020 WL 4194616, at *2 (D. Conn. July 21, 2020).

¹⁹ Conn. Gen. Stat. Ann. § 52-572p.

²⁰ Winslow, 562 A.2d 517.

²¹ Ga. Code Ann. § 51-1-11.1.

²² *Id*.

²³ Idaho Code § 6-1401 et seq.

²⁴ Idaho Code § 6-1401 provides that "[t]he previous existing applicable law of this state on product liability is modified only to the extent set forth in this act." The Idaho Supreme Court has held that "a non-privity breach of warranty action against a manufacturer or seller to recover personal injuries allegedly sustained as a result of a defective product" is governed by the Idaho Products Liability Act. *Pucket v. Oakfabco, Inc.*, 979 P.2d 1174, 1183 (Idaho 1999), *citing Oats v. Nissan Motor Corp.*, 879 P.2d 1095 (Idaho 1994).

²⁵ Idaho Code § 6-1407.

²⁶ Ind. Code § 34-20-1-1 et seq.

²⁷ Stegemoller v. ACandS, Inc., 767 N.E.2d 974, 975 (Ind. 2002) (the Indiana legislature intended that the Indiana Product Liability Act govern "all product liability actions, whether the theory of liability is negligence or strict liability in tort"); see also Dalton v. Teva N. Am., 891 F.3d 687, 691 (7th Cir. 2018). Ind. Code § 34-20-1-1 states, "[t]his article governs all actions that are: (1) brought by a user or consumer; (2) against a manufacturer or seller; and (3) for physical harm caused by a product; regardless of the substantive legal theory or theories upon which the action is brought."

²⁸ Ind. Code § 34-20-6-1 et seq.

²⁹ Stegemoller, 767 N.E.2d 974.

³⁰ Iowa Code § 613.18 (not a comprehensive products liability act).

³¹ *Id*.

³² Kan. Stat. Ann. § 60-3301 et seq.

³³ Flaherty v. CNH Indus. Am., LLC, 446 P.3d 1078, 1103 (Kan. Ct. App. 2019) (Kansas Product Liability Act supplants common-law actions sounding in tort, including negligence, strict liability, failure to warn, and negligent misrepresentation, but does not apply to claims for breach of warranty for economic loss); see also Gaumer v. Rossville Truck and Tractor Co., Inc., 257 P.3d 292, 297 (Kan. 2011) (expressing skepticism that the KPLA supplants common law because it does not contain the Model Uniform Product Liability Act's "in lieu of and preempts" language); but see Sangha v. Volkswagen AG, 2020 WL 3256262, at *5 (D. Kan. June 16, 2020) ("All products liability actions, regardless of theory, are merged into one product liability claim under the KLPA").

³⁴ Kan. Stat. Ann. § 60-3306.

³⁵ Ky. Rev. Stat. § 411-300 et seq.

³⁶ Monsanto v. Westinghouse Elec. Corp., 950 S.W. 2d 811, 814 (Ky. 1997) ("The PLA applies to all damage claims arising from the use of products, regardless of the legal theory advanced" and "if a claim is brought against a seller or a manufacturer of a product which is alleged to have caused injury, then the PLA applies, regardless of whether the action is founded on strict liability in tort, negligence or breach of warranty." See also Everage v. Johnson and Johnson, 2019 WL 1473428, at *1 (E.D. Ky. Apr. 3, 2019).

³⁷ Ky. Rev. Stat. § 411-340.

³⁸ *Monsanto*, 950 S.W. 2d 811.

³⁹ La. Rev. Stat. § 9:2800.51 et seq.

⁴⁰ Aucoin v. Southern Quality Homes, LLC, 984 So. 2d 685, 691 n. 8 (La. 2008) ("the LPLA is the exclusive remedy against manufacturers for damages resulting from a defective product" apart from damages recoverable under "redhibition").

⁴¹ La. Rev. Stat. §§ 9:2800.55-58.

⁴² Aucoin, 984 So. 2d 685.

⁴³ Mich. Comp. Laws 600.2946 et seq.

⁴⁴ Comments by the Michigan Supreme Court may imply exclusivity: *Greene v. A.P. Prods., Ltd.*, 717 N.W. 2d 855, 859 (Mich. 2006) ("Tort reform legislation enacted in 1995, however, displaced the common law"); *Ryan v. Brunswick Corp.*, 557 N.W.2d 541, 545 n. 8 (Mich.1997) ("Products liability claims in Michigan are based on a single statute, M.C.L. § 600.2946; M.S.A. § 27A.2946, and are fault based."), *abrogated on other grounds, Sprietsma v. Mercury Marine*, 537 U.S. 51 (2002).

⁴⁵ Mich. Comp. Laws 600.2946-2947 (including, e.g., drug manufacturer immunity provision for drugs approved by the U.S. Food and Drug Administration).

⁴⁶ Minn. Stat. § 544.41 (not a comprehensive products liability act).

⁴⁷ *Id*.

⁴⁸ Miss. Code Ann. § 11-1-63.

⁴⁹ Elliott v. El Paso Corp., 181 So. 3d 263, 269 n.8 (Miss. 2015) (quoting Miss. Code Ann. § 11-1-63 that the Mississippi Products Liability Act applies "in any action for damages caused by a product, including, but not limited to, any action based on a theory of strict liability in tort, negligence, or breach of implied warranty" and remarking "[s]o, in a case involving a product defect, even a claim for breach of an implied warranty would seem to be subsumed by the MPLA.")

⁵⁰ Miss. Code Ann. § 11-1-63.

⁵¹ Elliott, 181 So. 3d 263.

⁵² Mo. Rev. Stat. § 537.760 et seq.

⁵³ Peters v. General Motors Corp., 200 S.W. 3d 1, 17 (Mo. Ct. App. 2006) ("A plaintiff may also file a negligence or warranty claim together with a section 537.760 claim.") (citing Blevins v. Cushman Motors, 551 S.W. 2d 602, 607-608 (Mo. 1977)) (latter case decided prior to enactment of Missouri product liability statutes).

⁵⁴ Mo. Rev. Stat. § 537.762.

⁵⁵ Mo. Rev. Stat. § 537.764-765.

⁵⁶ Mont. Code § 27-1-719.

⁵⁷ A federal court predicting Montana law considered negligence, strict liability, failure to warn, and breach of warranty claims without determining that the claims were limited by Mont. Code § 27-1-719: *Winters v. Country Home Prods.*, *Inc.*, 654 F. Supp. 2d 1173 (D. Mont. 2009).

⁵⁸ Mont. Code § 27-1-719.

⁵⁹ Neb. Rev. Stat. § 25-21, 181 et seq.

⁶⁰ Nebraska courts do not appear to have ruled on this question, but they appear to permit actions on negligence and strict liability theories and have merged implied warranty claims with product liability claims for defective design and failure to warn: *Ribeiro v. Baby Trend, Inc.*, 2017 WL 11485740, at *3 (D. Neb. Apr. 12, 2017) (*citing Freeman v. Hoffman-La Roche, Inc.*, 618 N.W. 2d 827, 843 (Neb. 2000)).

⁶¹ Neb. Rev. Stat. § 25-21, 181.

⁶² Neb. Rev. Stat. § 25-21, 182.

⁶³ N.J. Stat. Ann. § 2A:58C-1 et seq.

⁶⁴ The New Jersey Product Liability Act preempts claims for manufacturing, warning, or design defects sounding in tort or nuisance, but not (1) express warranty claims, (2) claims under the New Jersey Consumer Fraud Act alleging express or affirmative misrepresentations, or, under N.J. Stat. Ann. 2A:58C-6, (3) claims pertaining "to any environmental tort action") *Sun Chem. Corp. v. Fike Corp.*, 235 A.3d 145, 153-155 (N.J. 2020).

⁶⁵ N.J. Stat. Ann. 2A:58C-2-4.

⁶⁶ Sun Chem. Corp., 235 A.3d 145.

⁶⁷ N.C. Gen. Stat. Ann. § 99B-1 et seq.

⁶⁸ The Act explicitly does not cover product liability actions for breach of express warranty, but the defenses supplied in the Act do apply to claims for breach of warranty unless expressly excluded, N.C. Gen. Stat. Ann. § 99B-2. The Act *does* cover actions for breach of implied warranty where the action is for injury to person or property resulting from a sale of a product. *Morrison v. Sears, Roebuck & Co.*, 354 S.E. 2d 495, 498-499 (N.C. 1987); *see also DeWitt v. Eveready Battery Co., Inc.*, 565 S.E. 2d 140, 147 (N.C. 2002).

⁶⁹ N.C. Gen. Stat. Ann. §§ 99B-2 to 99B-11.

⁷⁰ *Morrison*, 354 S.E. 2d 495; *DeWitt*, 565 S.E. 2d 140.

⁷¹ N.D. Cent. Code § 28-01.3-01 et seq.

The North Dakota products liability statute applies to actions sounding in negligence as well as strict liability. *Johnson v. John Deere Co.*, 935 F.2d 151, 154 (8th Cir. 1991). North Dakota courts treat breach of warranty as a contract claim separate from strict liability in tort, *Horstmeyer v. Golden Eagle Fireworks*, 534 N.W.2d 835, 839 (N.D. 1995), but it is not clear whether such claims are covered under the Product Liability Act. N.D. Cent. Code § 28-01.3-01(2) provides that "Product liability action" shall include any action brought against a manufacturer or seller "regardless of the substantive legal theory" of the action, on account of injury or damage resulting from the product.

⁷³ N.D. Cent. Code §§ 28-01.3-03 to 28-01.3-09.

⁷⁴ Ohio Rev. Code § 2307.71 et seq.

⁷⁵ Parker v. ACE Hardware Corp., 104 N.E. 3d 298, 305-307 (Ohio Ct. App. 2018) (finding that the Ohio Products Liability Act "provided the exclusive remedy" for negligence, negligent failure to warn, and negligent misrepresentation claims, as product liability claims under the OPLA, and accepting an Ohio federal court's view that "[t]hese common law claims have all been abrogated by the OPLA"). The court also concluded that breach of warranty claims not specifically raised under the U.C.C. are barred under the OPLA.

⁷⁶ Ohio Rev. Code §§ 2307.711 to 2307.78.

⁷⁷ Stiner v. Amazon.com, Inc., 2020-Ohio-4632, ¶ 27.

⁷⁸ Okla. Stat. Ann. 76 § 57.1 et seq., § 832.1 (not a comprehensive products liability act).

⁷⁹ Okla. Stat. Ann. 76 §§ 57.1 to 57.2. Courts have interpreted Okla. Stat. Ann. 76 §§ 57.2(E) to "add a new element to the cause of action" against a non-manufacturing seller. *Shelton v. Sha Ent.*, 2020 WL 6389858, at *2 (W.D. Okla. Oct. 30, 2020).

⁸⁰ Or. Rev. Stat. Ann. § 30.900 et seq.

⁸¹ *Phelps v. Wyeth, Inc.*, 857 F. Supp. 2d 1114, 1123 (D. Or. 2012) (since passage of Oregon Products Liability Act in 1977, "Oregon courts have ruled that the statute 'embraces *all* theories a plaintiff can adduce in an action based on a product defect,' including breaches of warranty."); *Mason v. Mt. St. Joseph, Inc.*, 203 P.3d 329, 332 (Or. Ct. App. 2009) (citing authority for the proposition that under the PLA, "a product liability civil action 'embraces all theories a plaintiff can claim in an action based on a product defect").

⁸² Or. Rev. Stat. Ann. §§ 30.902 to 30.928.

⁸³ S.C. Code Ann. § 15-73-10 et seq.

⁸⁴ South Carolina courts do not appear to have considered whether the state's products liability act provides the exclusive mechanism for a products liability action. Courts do permit plaintiffs to bring products liability actions under theories of negligence, strict liability, and breach of warranty: *Rife v. Hitachi Const. Mach. Co.*, 609 S.E. 2d 565, 568 (S.C. Ct. App. 2005).

⁸⁵ S.C. Code Ann. § 15-73-20.

⁸⁶ S.C. Code Ann. § 15-73-40.

⁸⁷ S.D. Cod. Laws § 20-9-9 et seq. (not a comprehensive products liability act).

⁸⁸ S.D. Cod. Laws §§ 20-9-9 to 20-9-10.1.

⁸⁹ Tenn. Code Ann. § 29-28-101 et seq.

⁹⁰ Tenn.Code Ann. § 29–28–102(6) defines "product liability action" to encompass "all actions brought for or on account of personal injury, death or property damage" resulting from any defective product, on a theory of "strict liability in tort; negligence; breach of warranty, express or implied; breach of or failure to discharge a duty to warn or instruct, whether negligent or innocent; misrepresentation, concealment, or nondisclosure, whether negligent, or innocent; or under any other substantive legal theory in tort or contract whatsoever." Courts have construed all such actions to fall within the Act's scope. *See*, *e.g.*, *Strayhorn v. Wyeth Pharm.*, *Inc.*, 882 F. Supp. 2d 1020, 1028 (W.D. Tenn. 2012) (collecting cases).

⁹¹ Tenn. Code Ann. §§ 29-28-103 to 29-28-108.

⁹² Tex. Civ. Prac. & Rem. Code Ann. § 82.001 et seq.

⁹³ Tex. Civ. Prac. & Rem. Code Ann. § 82.001(2) provides that "Products liability action' means any action against a manufacturer or seller for recovery of damages arising out of personal injury, death, or property damage allegedly caused by a defective product whether the action is based in strict tort liability, strict products liability, negligence, misrepresentation, breach of express or implied warranty, or any other theory or combination of theories." *See Eckhardt v. Qualitest Pharm. Inc.*, 889 F. Supp. 2d 901, 907 (S.D. Tex. 2012) (finding that plaintiffs' claims for negligence, fraud, and misrepresentation would "fall squarely within the statutory definition of a products liability action" and could not be pursued independently from the Texas products liability act).

⁹⁴ Tex. Civ. Prac. & Rem. Code Ann. §§ 82.003 to 82.008.

⁹⁵ Utah Code Ann. § 78B-5-816 et seq.

⁹⁶ Bylsma v. R.C. Willey, 416 P.3d 595, 600, 603 (Utah 2017) (the Utah Product Liability Act "references our products liability doctrine without changing or redefining any of the fundamental principles of that doctrine" and thereby "presuppose[s] the continued existence of a common law products liability doctrine," while the Liability Reform Act merely eliminates joint and several liability and creates no immunity for sellers).

⁹⁸ Wash. Rev. Code § 7.72.010 et seq.

⁹⁹ Wash. Water & Power Co. v. Graybar Electr. Co., 774 P.2d 1199, 1207 (Wash. 1989) ("the WPLA creates a single cause of action for product-related harms that supplants previously existing common law remedies."); see also City of Seattle v. Monsanto Co., 237 F. Supp. 3d 1096, 1102 ("The WPLA's statutory cause of action preempts all product-related common-law claims based on any substantive legal theory except fraud, intentionally caused harm, or claims under Washington's Consumer Protection Act").

¹⁰⁰ Wash Rev. Code §§ 7.72.030 to 7.72.050.

¹⁰¹ Wash. Water & Power, 774 P.2d 1199.

¹⁰² Wis. Stat. Ann. § 895.047.

¹⁰³ Courts in Wisconsin do not appear to have not ruled on the exclusivity of the Wisconsin product liability act passed in 2011.

¹⁰⁴ Wis. Stat. Ann. § 895.047.

Defendants' Appendix G Variation in Contributory/Comparative Negligence Defenses*

	Contributory Negligence	"Pure" Comparative Negligence	Modified Comparative Negligence
Alabama	Yes. ¹		
Alaska		Yes. ²	
Arizona		Yes. ³	
Arkansas			Yes. ⁴
California		Yes. ⁵	
Colorado		Yes, for product liability claims. ⁶	Yes, for non-product liability negligence claims. ⁷
Connecticut		Yes, for product liability claims. ⁸	Yes, for non-product liability negligence claims. ⁹
Delaware			Yes. ¹⁰
Florida		Yes. ¹¹	
Georgia			Yes. ¹²
Hawaii		Yes, for strict product liability claims. ¹³	Yes, for negligence claims. ¹⁴
Idaho			Yes. ¹⁵
Illinois			Yes. ¹⁶
Indiana			Yes. ¹⁷
Iowa			Yes. ¹⁸
Kansas			Yes. ¹⁹
Kentucky		Yes. ²⁰	
Louisiana		Yes. ²¹	
Maine			Yes. ²²

^{*} The analysis of state law in this document is preliminary and illustrative and should not be understood to represent the positions that Defendants will take on state law questions in this or any other case based a complete analysis of state law and the facts of particular claims.

	Contributory Negligence	"Pure" Comparative Negligence	Modified Comparative Negligence
Maryland	Yes, for negligence claims. ²³ However, "contributory negligence is not a defense in an action of strict liability in tort." ²⁴		
Massachusetts			Yes, for negligence claims. ²⁵ However, "[t]he apportionment principles used in negligence claims, which permit a plaintiff to recover as long as his negligence equates to less than the negligence attributed to the defendant, are not applicable to warranty cases." ²⁶
Michigan			Yes. ²⁷
Minnesota			Yes. ²⁸
Mississippi		Yes. ²⁹	
Missouri		Yes. ³⁰	
Montana			Yes, for negligence claims. ³¹ However, with a few exceptions, "contributory negligence is not a defense to the liability of a seller, based on strict liability in tort, for personal injury or property damage caused by a defectively manufactured or defectively designed product." ³²
Nebraska			Yes, for negligence claims. ³³ However, comparative negligence does not apply to strict liability claims. ³⁴
Nevada			Yes, for negligence claims. ³⁵ However, comparative negligence does not apply to strict product liability claims. ³⁶
New Hampshire			Yes. ³⁷
New Jersey			Yes. ³⁸
New Mexico		Yes. ³⁹	

	Contributory Negligence	"Pure" Comparative Negligence	Modified Comparative Negligence
New York		Yes. ⁴⁰	
North Carolina	Yes. ⁴¹		
North Dakota			Yes. ⁴²
Ohio			Yes. ⁴³
Oklahoma			Yes, for negligence claims. ⁴⁴ However, comparative negligence does not apply to strict product liability claim. ⁴⁵
Oregon			Yes. ⁴⁶
Pennsylvania			Yes, for negligence claims. ⁴⁷
Rhode Island		Yes. ⁴⁸	
South Carolina			Yes, for negligence claims. ⁴⁹ However, comparative negligence does not appear to apply to strict liability claims. ⁵⁰
South Dakota			Yes, for negligence claims. ⁵¹ However, "[t]he defense of contributory negligence is not available to bar recovery in a strict liability case." ⁵²
Tennessee			Yes. ⁵³
Texas			Yes. ⁵⁴
Utah			Yes. ⁵⁵
Vermont			Yes, for negligence claims. ⁵⁶ Likely, for strict liability claims. ⁵⁷
Virginia	Yes. ⁵⁸		
Washington		Yes. ⁵⁹	
West Virginia			Yes. ⁶⁰
Wisconsin			Yes. ⁶¹
Wyoming			Yes. ⁶²

	Contributory Negligence	"Pure" Comparative Negligence	Modified Comparative Negligence
District of Columbia	Yes, for negligence claims. ⁶³ However, "contributory negligence is not a defense in strict liability cases." ⁶⁴		
Puerto Rico		Probably. ⁶⁵	
U.S. Virgin Islands			Yes, for negligence claims. ⁶⁶ However, comparative negligence is not available in "any action based upon a statute the violation of which imposes absolute liability, whether or not such statute comprehends negligent conduct." ⁶⁷

¹ Burleson v. RSR Grp. Fla., Inc., 981 So. 2d 1109, 1112-13 (Ala. 2007) ("A plaintiff cannot recover in a negligence action where the plaintiff's own negligence is shown to have proximately contributed to his damage, notwithstanding a showing of negligence on the part of the defendant.") (citation omitted); Williams v. Delta Int'l Mach. Corp., 619 So. 2d 1330, 1333 (Ala. 1993) (declining to "abandon the doctrine of contributory negligence").

² Alaska Stat. § 09.17.060 ("In an action based on fault seeking to recover damages for injury or death to a person or harm to property, contributory fault chargeable to the claimant diminishes proportionately the amount awarded as compensatory damages for the injury attributable to the claimant's contributory fault, but does not bar recovery."); see Smith v. Ingersoll-Rand Co., 14 P.3d 990, 993-96 (Alaska 2000).

³ Ariz. Rev. Stat. §§ 12-2505(A) ("If the jury applies [contributory negligence], the claimant's action is not barred, but the full damages shall be reduced in proportion to the relative degree of the claimant's fault which is a proximate cause of the injury or death, if any."); 12-2509(B) ("contributory negligence, as distinguished from assumption of risk, is not a defense to a claim alleging strict liability in tort, including any product liability action . . . except claims alleging negligence."); *Jimenez v. Sears, Roebuck & Co.*, 904 P.2d 861, 864, 867 (Ariz. 1995) (interpreting section 12-2509(B) "as a badly-worded but successful attempt at preserving the common-law rule that contributory negligence is not a defense in strict liability," with contributory negligence referring to a plaintiff's "failure to discover a defect in the product which the plaintiff should, if he was reasonably diligent, have discovered") (alteration and citation omitted).

⁴ Ark. Code § 16-64-122(b)(1)-(2).

⁵ Li v. Yellow Cab Co., 532 P.2d 1226, 1242-43 (Cal. 1975) ("We have concluded that the 'pure' form of comparative negligence is that which should be adopted in this state," which "apportions liability in direct proportion to fault in all cases"); see Daly v. General Motors Corp., 20 Cal. 3d 725, 734-37 (Cal. 1978) (adopting comparative fault in strict product liability context).

⁶ Colo. Rev. Stat. § 13-21-406(1) ("The fault of the person suffering the harm shall not bar such person, or a party bringing an action on behalf of such a person, or his estate, or his heirs from recovering damages, but the award of damages to such person or the party bringing the action shall be diminished in proportion to the amount of causal fault attributed to the person suffering the harm.").

⁷ Colo. Rev. Stat. § 13-21-111(1), (3) ("[T]he court shall reduce the amount of the verdict in proportion to the amount of negligence attributable to the person for whose injury, damage, or death recovery is made; but, if the said proportion is equal to or greater than the negligence of the person against whom recovery is sought, then, in such event, the court shall enter a judgment for the defendant."); *Mountain Mobile Mix, Inc. v. Gifford*, 660 P.2d 883, 885 (Colo. 1983) ("A plaintiff in Colorado who is 50% or more negligent is barred from recovery under this modified contributory negligence rule.").

⁸ Conn. Gen. Stat. § 52-572o(a) ("[T]he comparative responsibility of, or attributed to, the claimant, shall not bar recovery but shall diminish the award of compensatory damages proportionately, according to the measure of responsibility attributed to the claimant.").

⁹ Conn. Gen. Stat. § 52-572h(b) ("In causes of action based on negligence, contributory negligence shall not bar recovery in an action by any person or the person's legal representative to recover damages resulting from personal injury, wrongful death or damage to property if the negligence was not greater than the combined negligence of the person or persons against whom recovery is sought including settled or released persons").

¹⁰ 10 Del. Code § 8132 ("In all actions brought to recover damages for negligence which results in death or injury to person or property, the fact that the plaintiff may have been contributorily negligent shall not bar a recovery by the plaintiff or the plaintiff's legal representative where such negligence was not greater than the negligence of the defendant or the combined negligence of all defendants against whom recovery is sought, but any damages awarded shall be diminished in proportion to the amount of negligence attributed to the plaintiff."); *Helm v. 206 Mass. Ave., LLC*, 107 A.3d 1074, 1079 (Del. 2014) ("Pursuant to Delaware's modified comparative negligence statute, if the plaintiff's contributory negligence is 50% or less, the plaintiff is permitted to recover, although the recovery is reduced proportionally. If the plaintiff's contributory negligence is 51% or greater, however, it is an absolute bar to recovery according to the Delaware statute.") (footnote omitted).

¹¹ Fla. Stat. § 768.81(2) ("In a negligence action, contributory fault chargeable to the claimant diminishes proportionately the amount awarded as economic and noneconomic damages for an injury attributable to the claimant's contributory fault, but does not bar recovery."); *West v. Caterpillar Tractor Co., Inc.*, 336 So. 2d 80, 92 (Fla. 1976) ("Contributory or comparative negligence is a defense in a strict liability action if based upon grounds other than the failure of the user to discover the defect in the product or the failure of the user to guard against the possibility of its existence.").

¹² Ga. Code § 51-12-33(a) ("Where an action is brought against one or more persons for injury to person or property and the plaintiff is to some degree responsible for the injury or damages claimed, the trier of fact, in its determination of the total amount of damages to be awarded, if any, shall determine the percentage of fault of the plaintiff and the judge shall reduce the amount of damages otherwise awarded to the plaintiff in proportion to his or her percentage of fault."), (g) ("Notwithstanding the provisions of this Code section or any other provisions of law which might be construed to the contrary, the plaintiff shall not be entitled to receive any damages if the plaintiff is 50 percent or more responsible for the injury or damages claimed."); *Johns v. Suzuki Motor of Am., Inc.*, — S.E.2d —, 2020 WL 6122133, at *1 (Ga. Oct. 19, 2020) (holding that strict product liability claims are subject to apportionment under the above statute). Furthermore, "[i]f the plaintiff by ordinary care could have avoided the consequences to himself caused by the defendant's negligence, he is not entitled to recover. In other cases the defendant is not relieved, although the plaintiff may in some way have contributed to the injury sustained." Ga. Code § 51-11-7.

¹³ Larsen v. Pacesetter Sys., Inc., 837 P.2d 1273, 1289-90 (Haw. 1992) ("In this jurisdiction, principles of pure comparative negligence apply to strict products liability actions."); Armstrong v. Cione, 738 P.2d 79, 82-83 (Haw. 1987) (rejecting application of modified comparative negligence to strict product liability).

¹⁴ Haw. Rev. Stat. § 663-31(a) ("Contributory negligence shall not bar recovery in any action by any person or the person's legal representative to recover damages for negligence resulting in death or in injury to person or property, if such negligence was not greater than the negligence of the person or in the case of more than one person, the aggregate negligence of such persons against whom recovery is sought, but any damages allowed shall be diminished in proportion to the amount of negligence attributable to the person for whose injury, damage or death recovery is made.").

¹⁵ Idaho Code §§ 6-1404 (product liability), 6-801 (negligence). "Under the 'individual rule' adopted by the Idaho legislature when it enacted comparative negligence, the negligence of the plaintiff must be compared against each individual defendant in determining whether the plaintiff may recover." *Beitzel v. Orton*, 827 P.2d 1160, 1164 (Idaho 1992). Thus, "the plaintiff's negligence is compared to the negligence of each individual defendant, such that a plaintiff may not recover from a defendant found to be as negligent or less negligent than himself." *Odenwalt v. Zaring*, 624 P.2d 383, 386 (Idaho 1980).

¹⁶ 735 ILCS 5/2-1116(c) ("In all actions on account of death, bodily injury or physical damage to property in which recovery is predicated upon fault, the contributory fault chargeable to the plaintiff shall be compared with the fault of all tortfeasors whose fault was a proximate cause of the death, injury, loss, or damage for which recovery is sought. The plaintiff shall be barred from recovering damages if the trier of fact finds that the contributory fault on the part of the plaintiff is more than 50% of the proximate cause of the injury or damage for which recovery is sought. The plaintiff shall not be barred from recovering damages if the trier of fact finds that the contributory fault on the part of the plaintiff is not more than 50% of the proximate cause of the injury or damage for which recovery is sought, but any economic or non-economic damages allowed shall be diminished in the proportion to the amount of fault attributable to the plaintiff.").

In strict product liability context, contributory negligence is available for misuse and assumption of risk but not for negligent failure to discover defect. *Coney v. J.L.G. Indus.*, *Inc.*, 454 N.E.2d 197, 203-04 (Ill. 1983).

- ¹⁷ Ind. Code § 34-20-8-1(a) ("In a product liability action, the fault of the person suffering the physical harm, as well as the fault of all others who caused or contributed to cause the harm, shall be compared by the trier of fact"); Ind. Code § 34-51-2-5 ("In an action based on fault, any contributory fault chargeable to the claimant diminishes proportionately the amount awarded as compensatory damages for an injury attributable to the claimant's contributory fault, but does not bar recovery except as provided in section 6 of this chapter."); Ind. Code § 34-51-2-6 (plaintiff's recovery barred if fault exceeds the fault of all other persons who proximately contributed to plaintiff's damages).
- ¹⁸ Iowa Code § 668.3(1) (contributory fault reduces plaintiff's damages unless plaintiff "bears a greater percentage of fault than the combined percentage of fault attributed to the defendants, third-party defendants and persons who have been released," in which case recovery is barred).
- ¹⁹ Kan. Stat. § 60-258a(a) ("The contributory negligence of a party in a civil action does not bar that party or its legal representative from recovering damages for negligence resulting in death, personal injury, property damage or economic loss, if that party's negligence was less than the causal negligence of the party or parties against whom a claim is made, but the award of damages to that party must be reduced in proportion to the amount of negligence attributed to that party."). ²⁰ Ky. Rev. Stat. § 411.182; *see also Hilen v. Hays*, 673 S.W.2d 713, 719-20 (Ky. 1984) (rejecting contributory negligence in favor of pure comparative negligence).
- ²¹ La. Civ. Code art. 2323.
- ²² 14 Me. Rev. Stat. § 156 (plaintiff's comparative negligence reduces recovery "to the extent considered just and equitable," though not necessarily proportionally, unless plaintiff "is found by the jury to be equally at fault," in which case plaintiff "may not recover").
- ²³ Coleman v. Soccer Ass'n of Columbia, 69 A.3d 1149, 1158 (Md. 2013) (maintaining contributory negligence); see Warsham v. James Muscatello, Inc., 985 A.2d 156, 167 n.10 (Md. App. 2009) ("[C]ontributory negligence, if proved, is a complete defense that bars a plaintiff's recovery in a negligence action.").
- ²⁴ Ellsworth v. Sherne Lingerie, Inc., 495 A.2d 348, 356 (Md. 1985).
- ²⁵ Mass. Gen. Laws 231 § 85 ("Contributory negligence shall not bar recovery in any action by any person or legal representative to recover damages for negligence resulting in death or in injury to person or property, if such negligence was not greater than the total amount of negligence attributable to the person or persons against whom recovery is sought, but any damages allowed shall be diminished in proportion to the amount of negligence attributable to the person for whose injury, damage or death recovery is made.").
- ²⁶ Rose v. Highway Equip. Co., 15 N.E.3d 241, 244 (Mass. App. 2014).
- ²⁷ Mich. Comp. Laws § 600.2959 (if plaintiff is less than 50% at fault, then all damages are reduced proportional to plaintiff's comparative fault, but if plaintiff is more than 50% at fault, then economic damages are reduced proportional to plaintiff's comparative fault and noneconomic damages are barred).
- ²⁸ Minn. Stat. § 604.41, subd. 1 ("Contributory fault does not bar recovery in an action by any person or the person's legal representative to recover damages for fault resulting in death, in injury to person or property, or in economic loss, if the contributory fault was not greater than the fault of the person against whom recovery is sought, but any damages allowed must be diminished in proportion to the amount of fault attributable to the person recovering."). Note that "the fault of multiple defendants is not to be aggregated pursuant to the comparative fault statute." *Erickson v. Whirlpool Corp.*, 731 F. Supp. 1426, 1428 (D. Minn. 1990).
- ²⁹ Miss. Code § 11-7-15 ("In all actions hereafter brought for personal injuries, or where such injuries have resulted in death, or for injury to property, the fact that the person injured, or the owner of the property, or person having control over the property may have been guilty of contributory negligence shall not bar a recovery, but damages shall be diminished by the jury in proportion to the amount of negligence attributable to the person injured, or the owner of the property, or the person having control over the property."); *see also Horton v. American Tobacco Co.*, 667 So. 2d 1289, 1292-93 (Miss. 1995) (applying comparative fault principles to strict liability claim).
- ³⁰ Mo. Stat. § 537.765(1) ("Contributory fault, as a complete bar to plaintiff's recovery in a products liability claim, is abolished. The doctrine of pure comparative fault shall apply to products liability claims as provided in this section.").
- Mont. Code § 27-1-702 ("Contributory negligence does not bar recovery in an action by a person or the person's legal representative to recover damages for negligence resulting in death or injury to the person or property if the contributory negligence was not greater than the negligence of the person or the combined

negligence of all persons against whom recovery is sought, but any damages allowed must be diminished in the proportion to the percentage of negligence attributable to the person recovering.").

- ³⁸ N.J. Stat. § 2A:15-5.1 ("Contributory negligence shall not bar recovery in an action by any person or his legal representative to recover damages for negligence resulting in death or injury to person or property, if such negligence was not greater than the negligence of the person against whom recovery is sought. Any damages sustained shall be diminished by the percentage sustained of negligence attributable to the person recovering."); *see also id.* § 2A:15-5.2(a) (requiring comparative fault analysis "[i]n all negligence actions and strict liability actions in which the question of liability is in dispute"). However, "[c]ontributory negligence is not a defense to a strict-liability action when a plaintiff's negligent conduct consists of merely failing to discover or guard against the possibility of a defect in a product." *Johansen v. Makita U.S.A., Inc.*, 607 A.2d 637, 641 (N.J. 1992).
- ³⁹ Scott v. Rizzo, 634 P.2d 1234, 1242 (N.M. 1981) ("We therefore hold that a pure comparative negligence standard shall supersede prior law in New Mexico, and that a plaintiff suing in negligence shall no longer be totally barred from recovery because of his contributory negligence."), superseded by statute in other part, N.M. Stat. § 41-3A-1; see Jaramillo v. Fisher Controls Co., Inc., 698 P.2d 887, 898-99 (N.M. App. 1985) (approving applicability of comparative negligence to product liability claim).
- ⁴⁰ N.Y. C.P.L.R. § 1411 ("In any action to recover damages for personal injury, injury to property, or wrongful death, the culpable conduct attributable to the claimant or to the decedent, including contributory negligence or assumption of risk, shall not bar recovery, but the amount of damages otherwise recoverable shall be diminished in the proportion which the culpable conduct attributable to the claimant or decedent bears to the culpable conduct which caused the damages.").

 ⁴¹ N.C. Gen. Stat. § 99B-4(3) ("No manufacturer or seller shall be held liable in any product liability action if . . . [t]he claimant failed to exercise reasonable care under the circumstances in the use of the product, and such failure was a proximate cause of the occurrence that caused the injury or damage complained of.").

 ⁴² N.D. Cent. Code § 32-03.2-02 ("Contributory fault does not bar recovery in an action by any person to recover damages for death or injury to person or property unless the fault was as great as the combined fault of all other persons who contribute to the injury, but any damages allowed must be diminished in proportion to the amount of contributing fault attributable to the person recovering.").
- ⁴³ Ohio R.C. § 2315.33 ("The contributory fault of a person does not bar the person as plaintiff from recovering damages that have directly and proximately resulted from the tortious conduct of one or more other persons, if the contributory fault of the plaintiff was not greater than the combined tortious conduct of all other persons from whom the plaintiff seeks recovery in this action and of all other persons from whom the plaintiff does not seek recovery in this action. The court shall diminish any compensatory damages recoverable by the plaintiff by an amount that is proportionately equal to the percentage of tortious conduct of the plaintiff").

³² *Id.* § 27-1-719(5).

³³ Neb. Rev. Stat. § 25-21,185.09 ("Any contributory negligence chargeable to the claimant shall diminish proportionately the amount awarded as damages for an injury attributable to the claimant's contributory negligence but shall not bar recovery, except that if the contributory negligence of the claimant is equal to or greater than the total negligence of all persons against whom recovery is sought, the claimant shall be totally barred from recovery.").

³⁴ Shipler v. General Motors Corp., 710 N.W.2d 807, 831-32 (Neb. 2006).

³⁵ Nev. Rev. Stat. § 41.141 ("In any action to recover damages for death or injury to persons or for injury to property in which comparative negligence is asserted as a defense, the comparative negligence of the plaintiff's decedent does not bar a recovery if that negligence was not greater than the negligence or gross negligence of the parties to the action against whom recovery is sought.").

³⁶ Young's Mach. Co. v. Long, 692 P.2d 24, 26 (Nev. 1984).

³⁷ N.H. Rev. Stat. § 507:7-d ("Contributory fault shall not bar recovery in an action by any plaintiff's legal representative, to recover damages in tort for death, personal injury or property damage, if such fault was not greater than the fault of the defendant, or the defendants in the aggregate if recovery is allowed against more than one defendant, but the damages awarded shall be diminished in proportion to the amount of fault attributed to the plaintiff by general verdict."); see Thibault v. Sears, Roebuck & Co., 395 A.2d 843, 850 (N.H. 1978) ("[J]udicially recognize[ing] the comparative concept in strict liability cases parallel to the legislature's recognition of it in the area of negligence.").

- ⁴⁶ Or. Rev. Stat. § 31.600(1) ("Contributory negligence shall not bar recovery in an action by any person or the legal representative of the person to recover damages for death or injury to person or property if the fault attributable to the claimant was not greater than the combined fault of all persons specified in subsection (2) of this section, but any damages allowed shall be diminished in the proportion to the percentage of fault attributable to the claimant."); *see Dahl v. Bayerische Motoren Werke (BMW)*, 748 P.2d 77, 80 (Or. 1987) (noting that comparative fault can apply to product liability claim).
- ⁴⁷ 42 Pa. Cons. Stat. § 7102(a) ("In all actions brought to recover damages for negligence resulting in death or injury to person or property, the fact that the plaintiff may have been guilty of contributory negligence shall not bar a recovery by the plaintiff or his legal representative where such negligence was not greater than the causal negligence of the defendant or defendants against whom recovery is sought, but any damages sustained by the plaintiff shall be diminished in proportion to the amount of negligence attributed to the plaintiff.").
- ⁴⁸ R.I. Gen. Laws § 9-20-4 ("In all actions hereafter brought for personal injuries, or where personal injuries have resulted in death, or for injury to property, the fact that the person injured, or the owner of the property or person having control over the property, may not have been in the exercise of due care or the fact that the danger or defect was open and obvious shall not bar a recovery, but damages shall be diminished by the finder of fact in proportion to the amount of negligence attributable to the person injured, or the owner of the property or the person having control over the property."); *see Lariviere v. Dayton Safety Ladder Co.*, 525 A.2d 892, 899 (R.I. 1987) (comparative negligence statute applies to negligence, strict liability, and breach of warranty claims).
- ⁴⁹ Nelson v. Concrete Supply Co., 399 S.E.2d 783, 784 (S.C. 1991) ("[A] plaintiff in a negligence action may recover damages if his or her negligence is not greater than that of the defendant. The amount of the plaintiff's recovery shall be reduced in proportion to the amount of his or her negligence. If there is more than one defendant, the plaintiff's negligence shall be compared to the combined negligence of all defendants.").
- ⁵⁰ See Donze v. General Motors, LLC, 800 S.E.2d 479, 485 (S.C. 2017) ("[B]oth strict liability and breach of warranty are statutory constructs as are the available defenses to these causes of action. If the General Assembly intends for comparative negligence to constitute a defense under either of these theories, it is unquestionably capable of amending these statutory schemes accordingly.") (internal citation omitted).
- ⁵¹ S.D.C.L §§ 20-9-1 ("Every person is responsible for injury to the person, property, or rights of another caused by his willful acts or caused by his want of ordinary care or skill, subject in the latter cases to the defense of contributory negligence."), 20-9-2 ("In all actions brought to recover damages for injuries to a person or to that person's property caused by the negligence of another, the fact that the plaintiff may have been guilty of contributory negligence does not bar a recovery when the contributory negligence of the plaintiff was slight in comparison with the negligence of the defendant, but in such case, the damages shall be reduced in proportion to the amount of plaintiff's contributory negligence.").

- ⁵³ Whitehead v. Toyota Motor Corp., 897 S.W.2d 684, 686 (Tenn. 1995) ("[S]o long as a plaintiff's negligence remains less than a defendant's negligence the plaintiff may recover; in such a case, plaintiff's damages are to be reduced in proportion to the percentage of the total negligence attributable to the plaintiff.") (citation omitted); see id. at 693 ("[C]omparative fault principles do apply in products liability actions based on strict liability in tort.").
- ⁵⁴ See Tex. Civ. Prac. & Rem. Code §§ 33.001 ("In an action to which this chapter applies, a claimant may not recover damages if his percentage of responsibility is greater than 50 percent."), 33.012(a) ("If the claimant is not barred from recovery under Section 33.001, the court shall reduce the amount of damages to be recovered by the claimant with respect to a cause of action by a percentage equal to the claimant's percentage of responsibility.").
- ⁵⁵ See Utah Code § 78B-5-818(2) ("A person seeking recovery may recover from any defendant or group of defendants whose fault, combined with the fault of persons immune from suit and nonparties to whom fault is allocated, exceeds the fault of the person seeking recovery"); S.H. ex rel. Robinson v. Bistryski, 923 P.2d 1376, 1380 (Utah 1996) ("We have previously held that comparative fault applies to a strict liability action.").

⁴⁴ 23 Okla. Stat. § 13 ("In all actions hereafter brought, whether arising before or after the effective date of this act, for negligence resulting in personal injuries or wrongful death, or injury to property, contributory negligence shall not bar a recovery, unless any negligence of the person so injured, damaged or killed, is of greater degree than any negligence of the person, firm or corporation causing such damage, or unless any negligence of the person so injured, damaged or killed, is of greater degree than the combined negligence of any persons, firms or corporations causing such damage.").

⁴⁵ See Kirkland v. General Motors Corp., 521 P.2d 1353, 1365 (Okla. 1974).

⁵² Berg v. Sukup Mfg. Co., 355 N.W.2d 833, 835 (S.D. 1984).

- ⁵⁸ See RGR, LLC v. Settle, 764 S.E.2d 8, 21 (Va. 2014); Smith v. Virginia Elec. & Power Co., 129 S.E.2d 655, 659 (Va. 1963) ("[O]ne who is guilty of negligence or contributory negligence, which causes or efficiently contributes to his injuries is not entitled to recover damages therefor."); see also Hottle v. Beech Aircraft Corp., 47 F.3d 106, 111 (4th Cir. 1995) ("Virginia law permits contributory negligence as a defense in failure to warn cases.").
- ⁵⁹ Wash. Rev. Code § 4.22.005 ("In an action based on fault seeking to recover damages for injury or death to person or harm to property, any contributory fault chargeable to the claimant diminishes proportionately the amount awarded as compensatory damages for an injury attributable to the claimant's contributory fault, but does not bar recovery.").
- ⁶⁰ W. Va. Code § 55-7-13a(b) ("In any action based on tort or any other legal theory seeking damages for personal injury, property damage, or wrongful death, recovery shall be predicated upon principles of comparative fault and the liability of each person, including plaintiffs, defendants and nonparties who proximately caused the damages, shall be allocated to each applicable person in direct proportion to that person's percentage of fault."); *id.* § 55-7-131c(c) ("Any fault chargeable to the plaintiff shall not bar recovery by the plaintiff unless the plaintiff's fault is greater than the combined fault of all other persons responsible for the total amount of damages, if any, to be awarded. If the plaintiff's fault is less than the combined fault of all other persons, the plaintiff's recovery shall be reduced in proportion to the plaintiff's degree of fault.").
- 61 Wis. Stat. § 895.045 ("Contributory negligence does not bar recovery in an action by any person or the person's legal representative to recover damages for negligence resulting in death or in injury to person or property, if that negligence was not greater than the negligence of the person against whom recovery is sought, but any damages allowed shall be diminished in the proportion to the amount of negligence attributed to the person recovering. The negligence of the plaintiff shall be measured separately against the negligence of each person found to be causally negligent."). Also applies to strict product liability. *Id.* § 895.045(3)(b)-(c) ("If the injured party's percentage of total causal responsibility for the injury is greater than the percentage resulting from the defective condition of the product, the injured party may not, based on the defect in the product, recover damages from the manufacturer, distributor, seller, or any other person responsible for placing the product in the stream of commerce"; "If the injured party's percentage of total causal responsibility for the injury is equal to or less than the percentage resulting from the defective condition of the product, the injured party may recover but the damages recovered by the injured party shall be diminished by the percentage attributed to that injured party.").
- ⁶² Wyo. Stat. § 1-1-109(b) ("Contributory fault shall not bar a recovery in an action by any claimant or the claimant's legal representative to recover damages for wrongful death or injury to person or property, if the contributory fault of the claimant is not more than fifty percent (50%) of the total fault of all actors. Any damages allowed shall be diminished in proportion to the amount of fault attributed to the claimant.").
- ⁶³ *Grogan v. General Maint. Serv. Co.*, 763 F.2d 444, 448 n.7 (D.C. Cir. 1985) ("Contributory negligence is a complete bar to recovery under District of Columbia law.").
- ⁶⁴ Warner Fruehauf Trailer Co., Inc. v. Boston, 654 A.2d 1272, 1275 n.7 (D.C. 1995).
- ⁶⁵ See 31 L.P.R. § 5141 ("Concurrent imprudence of the party aggrieved does not exempt from liability, but entails a reduction of the indemnity."); see also Montero Saldana v. American Motors Corp., 107 D.P.R. 452, 463 (P.R. 1978) (holding that comparative fault analysis applies in strict liability case). Puerto Rico recognizes something called "absorption of liability," which "basically stands for the proposition that when one of the faults is significantly larger than the other, the larger fault absorbs the lesser." Colon v. Rinaldi, 2006 WL 3421862, at *8 (D.P.R. Nov. 28, 2006). However, it appears that this doctrine "is limited to intentional fault and assumption of risk or the consent of the victim." Id. at *9 (citation omitted).
- ⁶⁶ 5 V.I. Code § 1451(a) ("In any action based upon negligence to recover for injury to person or property, the contributory negligence of the plaintiff shall not bar a recovery, but the damages shall be diminished by the trier of fact in proportion to the amount of negligence attributable to the plaintiff. . . . If such claimant is

⁵⁶ 12 Vt. Stat. § 1036 ("Contributory negligence shall not bar recovery in an action by any plaintiff, or his or her legal representative, to recover damages for negligence resulting in death, personal injury, or property damage, if the negligence was not greater than the causal total negligence of the defendant or defendants, but the damage shall be diminished by general verdict in proportion to the amount of negligence attributed to the plaintiff.").

⁵⁷ See Smith v. Goodyear Tire & Rubber Co., 600 F. Supp. 1561, 1568 (D. Vt. 1985); Webb v. Navistar Int'l Transp. Corp., 692 A.2d 343, 346-50 (Vt. 1996) (lead opinion).

found by the trier of fact to be more at fault than the defendant, or, in the case of multiple defendants, more at fault than the combined fault of the defendants, the claimant may not recover."). ⁶⁷ *Id.* § 1451(b).

Defendants' Appendix H Variations in Assumption of the Risk Defense*

	Affirmative Defense?	Elements	Part of Comparative Fault?	Differentiate Primary/Secondary Assumption of Risk?
Alabama	Yes. ¹	"Assumption of the risk has two subjective elements: (1) the plaintiff's knowledge and appreciation of the risk; and (2) the plaintiff's voluntary exposure to that risk."	N/A	No.
Alaska	No. ³	N/A	Yes. ⁴	No.
Arizona	Yes. ⁵	"The elements of assumption of the risk are (1) a risk of harm to the plaintiff caused by a condition of the defendant's property, (2) plaintiff's actual knowledge of the risk and appreciation of its magnitude, and (3) plaintiff's voluntary choice to accept the risk given the circumstances."	Yes. ⁷	No.
Arkansas	No.8	N/A	Yes. ⁹	No.
California	Yes, for primary assumption of risk. ¹⁰	Assumption of the risk "operate[s] as a complete bar to the plaintiff's recovery" "[i]n cases involving 'primary assumption of risk'—where, by virtue of the nature of the activity and the parties' relationship to the activity, the defendant owes no legal duty to protect the plaintiff from the particular risk of harm that caused the injury." In	Yes, for secondary assumption of risk. ¹²	Yes. ¹³
Colorado	Yes. ¹⁴	"[A] person assumes the risk of injury or damage if he voluntarily or unreasonably exposes himself to injury or damage with knowledge or appreciation of the danger and risk involved." ¹⁵	Yes. ¹⁶	No.

^{*} The analysis of state law in this document is preliminary and illustrative and should not be understood to represent the positions that Defendants will take on state law questions in this or any other case based a complete analysis of state law and the facts of particular claims.

	Affirmative Defense?	Elements	Part of Comparative Fault?	Differentiate Primary/Secondary Assumption of Risk?
Connecticut	No, for negligence claims. ¹⁷ Maybe, for nonnegligence claims. ¹⁸	To the extent that it still exists, "[t]he defense of assumption of risk is applicable when a person knows or as a reasonable person should know that in pursuing a certain course he will expose himself to the risk of injury, comprehends or ought as a reasonable person to comprehend the nature and extent of the risk and voluntarily subjects himself to it. He thus assumes the risk and cannot recover damages resulting from it." 19	Yes, for negligence claims. ²⁰	No.
Delaware	Yes, for primary assumption of risk. ²¹	"[P]rimary assumption of risk is implicated when the plaintiff expressly consents 'to relieve the defendant of an obligation of conduct toward him, and to take his chances of injury from a known risk arising from what the defendant is to do or leave undone."	Yes, for secondary assumption of risk. ²³	Yes. ²⁴
Florida	Yes, for express assumption of risk. ²⁵	N/A	Yes, for implied assumption of risk. ²⁶	No.
Georgia	Yes. ²⁷	"A defendant asserting an assumption of the risk defense must establish that the plaintiff (1) had knowledge of the danger; (2) understood and appreciated the risks associated with such danger; and (3) voluntarily exposed himself to those risks." ²⁸	No.	No.
Hawaii	Yes, for express assumption of risk. ²⁹	N/A	Yes, for secondary assumption of risk. ³⁰	Yes. ³¹
Idaho	Yes, for product liability claim. ³²	"When the product seller proves, by a preponderance of the evidence, that the claimant knew about the product's defective condition, and voluntarily used the product or voluntarily assumed the risk of harm from the product, the claimant's damages shall be subject to reduction to the extent that the claimant did not act as an ordinary reasonably prudent person under the circumstances." ³³	Yes. ³⁴	No.
Illinois	Yes. ³⁵	"[D]efendant bears the burden of proving that the plaintiff knew the product was in a dangerous condition and proceeded to use it in disregard of the known danger." ³⁶	Yes. ³⁷	No.

	Affirmative Defense?	Elements	Part of Comparative Fault?	Differentiate Primary/Secondary Assumption of Risk?
Indiana	Yes. ³⁸	"It is a defense to an action under this article (or IC 33-1-1.5 before its repeal) that the user or consumer bringing the action: (1) knew of the defect; (2) was aware of the danger in the product; and (3) nevertheless proceeded to make use of the product and was injured." ³⁹	No.	No.
Iowa	Yes, for claims not subject to contributory negligence. ⁴⁰	"[A]ssumption of risk is an affirmative defense to an established breach of duty; the defendant contending that the plaintiff acted unreasonably in encountering a known risk."	Yes, where contributory negligence is available. ⁴²	Yes. ⁴³
Kansas	No. ⁴⁴	N/A	Yes. ⁴⁵	No.
Kentucky	No. ⁴⁶	N/A	Yes. ⁴⁷	No.
Louisiana	Yes, in limited circumstances. ⁴⁸	To the extent it still exists, "assumption of risk turns on the plaintiff's actual knowledge of the danger, and whether he has voluntarily encountered a known risk."	Yes. ⁵⁰	No. ⁵¹
Maine	Yes, for contractual assumption of the risk. ⁵² Maybe, for strict liability claims. ⁵³	Assumption of the risk involves "voluntarily and unreasonably proceeding to encounter a known risk." 54	Yes. ⁵⁵	No.
Maryland	Yes. ⁵⁶	"The three subjective elements that the defendant must show are: 1) the plaintiff actually knew and appreciated the particular risk or danger created by the defect; 2) the plaintiff voluntarily encountered the risk while realizing the danger; and 3) the plaintiff's decision to encounter the known risk was unreasonable." ⁵⁷	No.	No.
Massachusetts	No, for negligence claims. ⁵⁸ Yes, for warranty claims. ⁵⁹	A plaintiff is barred from recovering under a warranty theory when he or she "unreasonably proceeds to use a product which he [or she] knows to be defective and dangerous." 60	Yes. ⁶¹	No.

	Affirmative Defense?	Elements	Part of Comparative Fault?	Differentiate Primary/Secondary Assumption of Risk?
Michigan	Yes, for product liability claims. 62 Maybe, for other claims. 63	"A manufacturer or seller is not liable in a product liability action if the purchaser or user of the product was aware that use of the product created an unreasonable risk of personal injury and voluntarily exposed himself or herself to that risk and the risk that he or she exposed himself or herself to was the proximate cause of the injury."	Yes. ⁶⁵	No.
Minnesota	No, for primary assumption of risk. ⁶⁶ Yes, for secondary assumption of the risk. ⁶⁷	Secondary assumption of risk applies "when the plaintiff has voluntarily chosen to encounter a known and appreciated danger created by the negligence of the defendant." 68	Yes, for secondary assumption of risk. ⁶⁹	Yes. ⁷⁰
Mississippi	Yes. ⁷¹	"In any action alleging that a product is defective pursuant to paragraph (a) of this section, the manufacturer, designer or seller shall not be liable if the claimant (i) had knowledge of a condition of the product that was inconsistent with his safety; (ii) appreciated the danger in the condition; and (iii) deliberately and voluntarily chose to expose himself to the danger in such a manner to register assent on the continuance of the dangerous condition." ⁷²	No.	No.
Missouri	No. ⁷³ Part of comparative negligence analysis.	N/A	Yes. ⁷⁴	No.
Montana	Yes, for product liability claims. ⁷⁵ No, for negligence claims. ⁷⁶	"A seller named as a defendant in an action based on strict liability in tort for damages to person or property caused by a defectively designed or defectively manufactured product may assert the following affirmative defenses against the user or consumer, the legal representative of the user or consumer, or any person claiming damages by reason of injury to the user or consumer: The user or consumer of the product discovered the defect or the defect was open and obvious and the user or consumer unreasonably made use of the product and was injured by it."	Yes. ⁷⁸	No.

	Affirmative Defense?	Elements	Part of Comparative Fault?	Differentiate Primary/Secondary Assumption of Risk?
Nebraska	Yes. ⁷⁹	"Assumption of risk shall mean that (1) the person knew of and understood the specific danger, (2) the person voluntarily exposed himself or herself to the danger, and (3) the person's injury or death or the harm to property occurred as a result of his or her exposure to the danger."	No.	No.
Nevada	Yes. ⁸¹	"In the case of strict products liability, the defendant must show (1) that the plaintiff actually knew and appreciated the particular risk or danger created by the defect, (2) that the plaintiff voluntarily encountered the risk while realizing the danger, and (3) that the plaintiff's decision to voluntarily encounter the known risk was unreasonable." Primary implied assumption of risk "arises when 'the plaintiff'	No. ⁸⁴	Yes. ⁸⁵
		impliedly assumes those risks that are <i>inherent</i> in a particular activity."83		
New Hampshire	Yes, for express and primary implied assumption of risk. ⁸⁶	Express assumption of the risk "applies when a plaintiff assumes the risk of injury by expressly releasing a defendant from liability for negligent acts."	Yes, for secondary implied assumption of	Yes. ⁹¹
	No, for secondary implied assumption of risk. ⁸⁷	Primary implied assumption of the risk "applies when a plaintiff voluntarily and reasonably enters into some relation with a defendant, which the plaintiff reasonably knows involves certain obvious risks such that a defendant has no duty to protect the plaintiff against injury caused by those risks." ⁸⁹	risk. ⁹⁰	
New Jersey	No. ⁹²	N/A	Yes. ⁹³	No.
New Mexico	No. ⁹⁴	N/A	Yes. ⁹⁵	Yes. ⁹⁶
New York	Yes. ⁹⁷	Assumption of risk is based on plaintiff's "agreement, express or implied, not to hold defendant responsible for the injury-causing act, negligent though it may have been, which resulted from plaintiff's entering into the activity with knowledge of its danger, or under circumstances from which it could be found that he or she should have had such knowledge."	Yes. ⁹⁹	No.

	Affirmative Defense?	Elements	Part of Comparative Fault?	Differentiate Primary/Secondary Assumption of Risk?
North Carolina	Unclear. ¹⁰⁰	To the extent that it is an available defense, "[n]o manufacturer or seller shall be held liable in any product liability action if: [t]he user knew of or discovered a defect or dangerous condition of the product that was inconsistent with the safe use of the product, and then unreasonably and voluntarily exposed himself or herself to the danger, and was injured by or caused injury with that product." 101	No. ¹⁰²	No.
North Dakota	No. ¹⁰³	N/A	Yes. ¹⁰⁴	No.
Ohio	Yes, for product liability claims against manufacturers and express and primary assumption of risk for non-product liability claims. 105	For product liability claims, "[i]f the user or consumer discovers the defect and is aware of the danger, and nevertheless proceeds unreasonably to make use of the product and is injured by it, he is barred from recovery." "Express assumption of the risk applies when parties expressly agree to release liability." Under primary assumption of the risk, "a plaintiff who voluntarily engages in a recreational activity or sporting event assumes the inherent risks of that activity and cannot recover for injuries sustained in engaging in the activity unless the defendant acted recklessly or intentionally in causing the injuries." 108	Yes, for product liability claims against suppliers and secondary assumption of risk. 109	Yes. ¹¹⁰
Oklahoma	Yes. ¹¹¹	A defendant "must prove that the plaintiff was subjectively aware of and appreciated the specific dangers in using the specific product in the specific manner he was using it when the accident occurred." ¹¹²	Yes. ¹¹³	No.
Oregon	No. ¹¹⁴	N/A	Yes. ¹¹⁵	No.
Pennsylvania	Yes. ¹¹⁶	"If the user or consumer discovers the defect and is aware of the danger, and nevertheless proceeds unreasonably to make use of the product and is injured by it, he is barred from recovery." "Voluntary assumption of the risk involves a subjective awareness of the risk inherent in an activity and a willingness to accept it. A plaintiff has voluntarily assumed the risk where he fully understands it and voluntarily chooses to encounter it." "118	No.	No.

	Affirmative Defense?	Elements	Part of Comparative Fault?	Differentiate Primary/Secondary Assumption of Risk?
Rhode Island	Yes. ¹¹⁹	"In order to establish an assumption-of-risk defense, defendants must prove that the plaintiff knew of the existence of the danger, appreciated its unreasonable character, and voluntarily exposed herself to it." ¹²⁰	No.	No.
South Carolina	Yes, for product liability claims and express assumption of risk. ¹²¹	"If the user or consumer discovers the defect and is aware of the danger, and nevertheless proceeds unreasonably to make use of the product and is injured by it, he is barred from recovery." 122	Yes, for secondary assumption of risk. 123	Yes. ¹²⁴
South Dakota	Yes. ¹²⁵	"A plaintiff assumes the risk when he is 'aware the product is defective, knows the defect makes the product unreasonably dangerous, has reasonable opportunity to elect whether to expose himself to the danger, and nevertheless proceeds to make use of the product." [A] person assumes the risk of injury when the person: '(1) had actual or constructive knowledge of the risk; (2) appreciated its character; and (3) voluntarily accepted the risk, with the time, knowledge, and experience to make an intelligent choice." "127	No.	No.
Tennessee	Yes, for express assumption of risk. ¹²⁸	Express assumption of risk "refers to an express release, waiver, or exculpatory clause, by which one party agrees to assume the risk of harm arising from another party's negligence." ¹²⁹	Yes, for implied assumption of risk. 130	No.
Texas	No. ¹³¹	N/A	Yes. ¹³²	No.
Utah	No. ¹³³	N/A	Yes. ¹³⁴	No.
Vermont	No. ¹³⁵	N/A	Yes, for secondary assumption of risk. ¹³⁶ Probably, for strict liability claims. ¹³⁷	Yes. ¹³⁸
Virginia	Yes. ¹³⁹	"Application of the defense of assumption of risk requires use of a subjective standard, which addresses whether a particular plaintiff fully understood the nature and extent of a known danger and voluntarily exposed herself to that danger." 140	No.	No.

	Affirmative Defense?	Elements	Part of Comparative Fault?	Differentiate Primary/Secondary Assumption of Risk?
Washington	Yes, for express and implied primary assumption of risk. ¹⁴¹	"The evidence must show that the plaintiff (1) had full subjective understanding, (2) of the presence and nature of the specific risk, and (3) voluntarily chose to encounter that risk." ¹⁴²	Yes, for implied secondary assumption of risk. ¹⁴³	Yes. ¹⁴⁴
West Virginia	West Virginia recognizes comparative assumption of the risk, whereby "a plaintiff is not barred from recovery by the doctrine of assumption of risk unless his degree of fault arising therefrom equals or exceeds the combined fault or negligence of the other parties to the accident." 145	"[T]he defense of assumption of risk is available against a plaintiff in a product liability case where it is shown that the plaintiff had actual knowledge of the defective or dangerous condition, fully appreciated the risks involved, and continued to use the product." 146	No.	No.
Wisconsin	Yes, for express assumption of risk. ¹⁴⁷		Yes, for anything other than express assumption of risk. ¹⁴⁸	No.
Wyoming	No. ¹⁴⁹	N/A	Yes, for secondary assumption of risk. ¹⁵⁰	Yes. ¹⁵¹
District of Columbia	Yes. ¹⁵²	"[T]he plaintiff must subjectively know of the existence of the risk and appreciate its unreasonable character." ¹⁵³ "In order to establish an assumption of risk defense in a strict liability action, the defendant must show that the plaintiff knew of the specific defect in the product and was aware of the danger arising from it, but nevertheless voluntarily and unreasonably proceeded to use the product." ¹⁵⁴	No.	No.

	Affirmative Defense?	Elements	Part of Comparative Fault?	Differentiate Primary/Secondary Assumption of Risk?
Northern Mariana Islands	Probably. ¹⁵⁵	"[A] plaintiff who fully understands a risk of harm to himself caused by the defendant's conduct and who nevertheless voluntarily chooses to enter or remain, under circumstances that manifest his willingness to accept it, is not entitled to recover for harm within that risk." ¹⁵⁶	Probably not.	No.
Puerto Rico	Yes, for primary assumption of risk. ¹⁵⁷	Primary assumption of risk applies "where the plaintiff, with full knowledge of the risk, enters into a relation with the defendant involving danger to himself." ¹⁵⁸	Yes, for secondary assumption of risk. ¹⁵⁹	Yes. ¹⁶⁰
U.S. Virgin Islands	Probably, for "non- negligent conduct which constitutes waiver or consent." ¹⁶¹		Probably, "to the extent it incorporates the concept of fault on the part of the actor." 162	No.

¹ Kelton v. Gulf States Steel, Inc., 575 So. 2d 1054, 1055 (Ala. 1991).

² Ex parte Barran, 730 So. 2d 203, 206 (Ala. 1998); Kelton, 575 So. 2d at 1055 ("The affirmative defense of assumption of risk . . . is restricted by two requirements: 1) knowledge and appreciation by the plaintiff of the danger he is incurring; and 2) voluntary consent to bear that risk.").

³ Leavitt v. Gillaspie, 443 P.2d 61, 68 (Alaska 1968); Powell v. Alaska Marine Equip., Inc., 453 P.2d 407, 409 n.5 (Alaska 1969); Hale v. O'Neill, 492 P.2d 101, 103 (Alaska 1971).

⁴ *Hale*, 492 P.2d at 103.

⁵ Ariz. Rev. Stat. § 12-2505(A) ("The defense of contributory negligence or of assumption of risk is in all cases a question of fact and shall at all times be left to the jury.").

⁶ Gonzales v. Arizona Pub. Serv. Co., 775 P.2d 1148, 1153 (Ariz. App. 1989); see Jimenez v. Sears, Roebuck & Co., 904 P.2d 861, 865 (Ariz. 1995) (in productliability context, "knowledge of a product's defect . . . is essential for assumption of risk").

⁷ Ariz. Rev. Stat. § 12-2505(A) ("If the jury applies [assumption of the risk], the claimant's action is not barred, but the full damages shall be reduced in proportion to the relative degree of the claimant's fault which is a proximate cause of the injury or death, if any.").

⁸ Ouachita Wilderness Inst., Inc. v. Mergen, 947 S.W.2d 780, 786 (Ark. 1997) ("Arkansas is a comparative fault state," so "because the jury must compare negligence . . . , the doctrine of assumption of the risk is no longer applicable in Arkansas as a separate theory").

⁹ Howard v. Nucor-Yamato Steel Co., 2016 WL 697131, at *6 (E.D. Ark. Feb. 22, 2016) ("Assumption of risk i[s] not a separate theory; it has been subsumed under Arkansas law into the definition of fault."); see Ouachita Wilderness, 947 S.W.2d at 786.

¹⁰ Knight v. Jewett, 834 P.2d 696, 707-08 (Cal. 1992).

¹¹ *Id*.

¹² Id. ("In cases involving 'secondary assumption of risk'—where the defendant does owe a duty of care to the plaintiff, but the plaintiff proceeds to encounter a known risk imposed by the defendant's breach of duty—the doctrine is merged into the comparative fault scheme, and the trier of fact, in apportioning the loss resulting from the injury, may consider the relative responsibility of the parties."). 13 *Id*.

¹⁴ Harris v. The Ark, 810 P.2d 226, 231 (Colo. 1991) ("[A] plaintiff's assumption of a known risk still remains an affirmative defense, as it was under the case law predating the comparative negligence system, but does not constitute an absolute bar to a plaintiff's negligence claim.").

¹⁵ Colo. Rev. Stat. § 13-21-111.7 (emphasis added); see also Harris, 810 P.2d at 231-33 & n.6.

¹⁶ See Colo. Rev. Stat. § 13-21-111.7 ("Assumption of a risk by a person shall be considered by the trier of fact in apportioning negligence pursuant to section 13-21-111."); P.W. v. Children's Hosp. Colo., 364 P.3d 891, 895 n.2 (Colo. 2016) ("[T]he question of a plaintiff's assumption of risk is folded within the comparative negligence analysis "); see Hendrickson v. Doyle, 150 F. Supp. 3d 1233, 1243 (D. Colo. 2015) ("Assumption of the risk is . . . simply another matter to consider in the comparative negligence analysis.").

¹⁷ Conn. Gen. Stat. § 52-572h(l) ("The legal doctrines of last clear chance and assumption of risk in actions to which this section is applicable are abolished.").

¹⁸ Compare, e.g., Wasilewski v. Abel Womack, Inc., 2016 WL 183471, at *12 (D. Conn. Jan. 14, 2016) (barring evidence of assumption of the risk with respect to product liability claim), with William Martens PPA v. Wild Bill Surplus Inc., 1995 WL 384672, at *2 (Conn. Super. Ct. June 20, 1995) ("The legislature apparently intended then that assumption of risk still had a place in product liability law despite the origin of claims under that doctrine in common law negligence.").

¹⁹ Nally v. Charbonneau, 362 A.2d 494, 496 (Conn. 1975).

²⁰ Wendland v. Ridgefield Constr. Servs., Inc., 462 A.2d 1043, 1047 (Conn. 1983) ("[T]he factors relevant to the assumption of risk doctrine may be considered by the trier" "[i]n determining the relative negligence of each party").

²¹ Helm v. 2016 Mass. Ave., LLC, 107 A.3d 1074, 1080 (Del. 2014) ("The effect of a successful primary assumption of risk defense is that the defendant is relieved of legal duty to the plaintiff; and being under no legal duty, he or she cannot be charged with negligence."") (citation omitted).

²² *Id.* (citation omitted).

²³ "[S]econdary assumption of risk is generally implicated where 'the plaintiff's conduct in encountering a known risk may itself be unreasonable, because the danger is out of proportion to the advantage which he is seeking to obtain[.]" Id. at 1080 (citation omitted). "The defense does not, however, relieve a defendant of any legal duty to a plaintiff. The conduct of the plaintiff is instead considered a form of comparative negligence and recovery is dependent upon the relative fault a fact-finder attributes to him or her. Accordingly, it is now accepted in Delaware that the concept of secondary assumption of risk is completely subsumed by the principles of comparative negligence." *Id.* (footnote omitted).

 $^{^{24}}$ *Id*.

²⁵ *Mazzeo v. City of Sebastian*, 550 So. 2d 1113, 1116 (Fla. 1989).

²⁶ Blackburn v. Dorta, 348 So. 2d 287, 293 (Fla. 1977).

²⁷ Deere & Co. v. Brooks, 299 S.E.2d 704 (Ga. 1983), superseded in other part by statute, Ga. Code § 51-12-33; Gilreath v. Smith, 797 S.E.2d 177 (Ga. App. 2017).

²⁸ Gilreath, 797 S.E.2d at 180 ("The knowledge requirement does not refer to a comprehension of general, non-specific risks. Rather, the knowledge that a plaintiff who assumes the risk must subjectively possess is that of the specific, particular risk of harm associated with the activity or condition that proximately causes injury.") (citation omitted); see also Garner v. Rite Aid of Ga., Inc., 595 S.E.2d 582, 585 (Ga. App. 2004) ("The standard in assessing the defense of assumption of the risk is 'a subjective one, geared to the particular plaintiff and his situation,' rather than an objective standard geared to the reasonable person of ordinary prudence as applied in determining contributory negligence, a completely separate defense.") (citation omitted).

²⁹ Larsen v. Pacesetter Sys., Inc., 837 P.2d 1273, 1291 (Haw. 1992) ("[E]xpress assumption of risk," which "is essentially contractual in nature," "survives the merger with comparative negligence in products liability cases and . . . express assumption of risk is available as a separate defense that may bar plaintiff's recovery in tort and warranty strict products liability actions.").

³⁰ *Id.* at 1290-91 (secondary assumption of the risk, which "focuses on a plaintiff's conduct, and describes a situation where plaintiff knows of the danger presented by a defendant's negligence and proceeds voluntarily and unreasonably to encounter it," is "retained . . . solely as a form of contributory negligence to be compared against defendant's fault," and thus "serves to reduce, rather than bar, plaintiff's recoveries").

³¹ *Id.*

³² Idaho Code § 6-1405(2)(a); *Salinas v. Vierstra*, 695 P.2d 369, 374-75 (Idaho 1985) (with the exception of express assumption of the risk orally or in writing, "assumption of risk shall no longer be available as an absolute bar to recovery in any action instituted in this state"); *see also Rountree v. Boise Baseball, LLC*, 296 P.3d 373, 380 (Idaho 2013) ("[A]ssumption of the risk has no legal effect as a defense, except in instances of express written or oral consent.").

³³ Idaho Code § 6-1405(2)(a).

³⁴ Salinas, 695 P.2d at 374 ("The types of issues raised by a plaintiff's non-express assumption of risk should be discussed in terms of contributory negligence, not assumption of risk, and applied accordingly under [Idaho's] comparative negligence laws.").

³⁵ Boland v. Kawasaki Motors Mfg. Corp., USA, 722 N.E.2d 1234, 1241-42 (Ill. App. Ct. 2000); Cleveringa v. J.I. Case Co., 595 N.E.2d 1193, 1208 (Ill. App. Ct. 1992) ("The doctrine of assumption of the risk is an affirmative defense in product liability cases.").

³⁶ Cleveringa, 595 N.E.2d at 1208 ("In a product liability case, the issue of whether the plaintiff assumed the risk of using the product must refer to the use of that aspect of the product that was alleged and proven to be unreasonably dangerous."); see Boland, 722 N.E.2d at 1241 ("The test for assumption of risk is a subjective one that allows the jury to consider the individual plaintiff's knowledge, experience, and background in determining whether he has assumed the risk of using a product known by him to be dangerous.").

³⁷ Hanlon v. Airco Indus. Gases, 579 N.E.2d 1136, 1141 (Ill. App. Ct. 1991) ("[T]he affirmative defense of assumption of the risk no longer completely bars recovery; instead, the misconduct will be compared in the apportionment of damages.").

³⁸ Ind. Code § 34-20-6-3; *Smock Materials Handling Co., Inc. v. Kerr*, 719 N.E.2d 396, 402 (Ind. App. 1999) ("Incurred risk can operate as a defense to both strict liability and negligence claims.") (footnotes omitted).

³⁹ Ind. Code § 34-20-6-3.

⁴⁰ Coker v. Abell-Howe Co., 491 N.W.2d 143, 147 (Iowa 1992); see Rosenau v. City of Estherville, 199 N.W.2d 125, 133 (Iowa 1972) ("We retain assumption of risk as a defense in other cases."); see also Nichols v. Westfield Indus., Ltd., 380 N.W.2d 392, 399 (Iowa 1985) ("Primary assumption of risk is not an affirmative defense," but rather "is 'an alternative expression for the proposition that defendant was not negligent, i.e., either owed no duty or did not breach the duty owed.") (citation omitted).

⁴¹ Coker, 491 N.W.2d at 146-47.

⁴² Arnold v. City of Cedar Rapids, 443 N.W.2d 332, 333 (Iowa 1989) (secondary assumption of risk is "abolished . . . as a separate defense in all cases in which contributory negligence is available as a defense").

⁴³ See id.; Nichols, 380 N.W.2d at 399.

⁴⁴ Simmons v. Porter, 312 P.3d 345, 348 (Kan. 2013).

⁴⁵ *Id*.

⁴⁶ Parker v. Redden, 421 S.W.2d 586, 592 (Ky. 1967).

⁴⁷ See id.

⁴⁸ Menzer v. Kilian, — So. 3d —, 2018 WL 6519870, at *5 (La. App. Dec. 12, 2018) (assumption of the risk continues to operate where (1) "the plaintiff expressly agreed to release the defendant from liability," or (2) the plaintiff has "opted to place [himself] in situations which involve virtually unpreventable risks"); see also

Murray v. Ramada Inns, Inc., 521 So. 2d 1123, 1125 (La. 1988) ("[A]ssumption of risk should not operate as a total bar to recovery regardless of whether the defendant is found negligent or strictly liable.").

- ⁴⁹ *Murray*, 521 So. 2d at 1130.
- ⁵⁰ See Menzer, 2018 WL 6519870, at *5 ("[A]ssumption of the risk ha[s] been subsumed into Louisiana's . . . comparative fault scheme and no longer operate[s] to bar a plaintiff's recovery.").
- ⁵¹ *Murray*, 521 So. 2d at 1131 ("Louisiana courts have not followed the common law tradition of dividing assumption of risk into various categories, such as 'express,' 'implied primary,' and 'implied secondary.'").
- ⁵² Wilson v. Gordon, 354 A.2d 398, 401-02 (Me. 1976) ("[V]oluntary assumption of the risk" has been abolished by the comparative fault statute, although "[c]ontractual assumption of the risk" remains a viable defense); accord Merrill v. Sugarloaf Mountain Corp., 745 A.2d 378, 383 n.3 (Me. 2000).
- ⁵³ Johnson v. Chrysler Corp., 187 F.R.D. 440, 442 (D. Me. 1999); see also Austin v. Raybestos-Manhattan, Inc., 471 A.2d 280, 287 (Me. 1984) ("[C]ontributory negligence of the nature that formerly was separately denominated 'assumption of the risk' is a defense to a strict liability claim").
- ⁵⁴ *Austin*, 471 A.2d at 287.
- ⁵⁵ Wilson, 354 A.2d at 401-02.
- ⁵⁶ Poole v. Coakley & Williams Constr., Inc., 31 A.3d 212, 224 (Md. 2011) ("[A]ssumption of the risk functions as a complete bar to recovery because 'it is a previous abandonment of the right to complain if an accident occurs.").
- ⁵⁷ Ellsworth v. Sherne Lingerie, Inc., 495 A.2d 348, 356 (Md. 1985) (citation omitted).
- ⁵⁸ Mass. Gen. Laws Ch. 231 § 85 ("The defense of assumption of risk is hereby abolished in all actions hereunder.").
- ⁵⁹ See Haglund v. Philip Morris, Inc., 847 N.E.2d 315, 323-24 (Mass. 2006).
- ⁶⁰ *Id.* (citation omitted).
- ⁶¹ See Mass. Gen. Laws Ch. 231 § 85.
- ⁶² Mich. Comp. Laws § 600.2947(3).
- ⁶³ Felgner v. Anderson, 133 N.W.2d 136, 153 (Mich. 1965) (outside product-liability context, "the doctrine of assumption of risk in [Michigan] properly is applicable only to cases in which an employment relationship exists between the parties, as well, perhaps, where there has been an express contractual assumption of risk.").
- ⁶⁴ Mich. Comp. Laws § 600.2947(3). However, "[t]his subsection does not relieve a manufacturer or seller from a duty to use reasonable care in a product's production." *Id*.
- ⁶⁵ See Felgner, 133 N.W.2d at 154 ("The traditional concepts of contributory negligence are more than ample to present that affirmative defense [assumption of risk] to established negligent acts.").
- ⁶⁶ Olson v. Hansen, 216 N.W.2d 124, 127 (Minn. 1974) ("Primary assumption of risk is not so much an affirmative defense as an expression of the idea that the defendant owes a limited duty of care to the plaintiff with respect to the risk incident to their relationship.").
- ⁶⁷ Wagner v. Thomas J. Obert Enters., 396 N.W.2d 223, 226 (Minn. 1986) ("[S]econdary assumption of risk 'is an affirmative defense to an established breach of duty'") (citation omitted).
- ⁶⁸ *Id.* (citation omitted).
- ⁶⁹ *Id.* ("Secondary assumption of risk is a form of contributory negligence."); *see also Springrose v. Willmore*, 192 N.W.2d 826, 827 (Minn. 1971) ("[A]ssumption of risk must be apportioned under our comparative negligence statute.").
- ⁷⁰ *Wagner*, 396 N.W.2d at 226.
- ⁷¹ Miss. Code § 11-1-63(d) (applies "in any action for damages caused by a product, including, but not limited to, any action based on a theory of strict liability in tort, negligence or breach of implied warranty"); *Green v. Allendale Planting Co.*, 954 So. 2d 1032, 1040 (Miss. 2007) (holding that section 11-1-63(d) "precludes liability for defective design when the plaintiff assumes the risk of his injuries").

⁷² Miss. Code § 11-1-63(d).

⁷³ See Egelhoff v. Holt, 875 S.W.2d 543, 548 (Mo. 1994).

⁷⁴ See Mo. Stat. § 537.765(3) (defining "fault"); Egelhoff, 875 S.W.2d at 548.

⁷⁵ See Mont. Code § 27-1-719(5)(a).

⁷⁶ Kopischke v. First Continental Corp., 610 P.2d 668, 687 (Mont. 1980); see also Abernathy v. Eline Oil Field Servs., Inc., 650 P.2d 772, 775-76 (Mont. 1982) ("[T]he doctrine of implied assumption of risk is no longer applicable in Montana.")

⁷⁷ Mont. Code § 27-1-719(5)(a).

⁷⁸ *Kopischke*, 610 P.2d at 687 ("[W]e will follow the modern trend and treat assumption of the risk like any other form of contributory negligence and apportion it under the comparative negligence statute.").

⁷⁹ Neb. Rev. Stat. § 25-21,185.12 ("Assumption of risk is an affirmative defense.").

⁸⁰ *Id.*; see also Burke v. McKay, 679 N.W.2d 418, 424 (Neb. 2004) ("The doctrine of assumption of risk applies a subjective standard, geared to the individual plaintiff and his or her actual comprehension and appreciation of the nature of the danger he or she confronts.").

⁸¹ Central Tel. Co. v. Fixtures Mfg. Corp., 738 P.2d 510, 512 (Nev. 1987) (assumption of risk "is a defense to strict products liability"); see also Turner v. Mandalay Sports Entm't, LLC, 180 P.3d 1172, 1177 (Nev. 2008).

⁸² Central Tel., 738 P.2d at 512.

⁸³ Turner, 180 P.3d at 1177 (citation omitted).

⁸⁴ See id. (outside product liability context, primary implied assumption of the risk is "incorporated into the [trial] court's initial duty analysis").

⁸⁵ See id.

⁸⁶ Allen v. Dover Co-Recreational Softball League, 807 A.2d 1274, 1281-83 (N.H. 2002).

⁸⁷ *Id.* at 1281-82.

⁸⁸ *Id.* at 1281.

⁸⁹ *Id.* at 1282.

⁹⁰ *Id.* at 1281-82 ("[A] defendant is not relieved from liability for breaching a duty; instead, a plaintiff's contributory negligence is compared to the defendant's negligence to apportion fault in causing the plaintiff's injury.").

⁹¹ *Id.* at 1281-83.

⁹² See Lewis v. American Cyanamid Co., 715 A.2d 967, 974 (N.J. 1998) ("For plaintiff to be held comparatively negligent, he must have voluntarily and unreasonably encountered the known risk of [injury].").

⁹³ See id.

⁹⁴ Williamson v. Smith, 491 P.2d 1147, 1148 (N.M. 1971) ("We have decided that assumption of risk should no longer be recognized as an affirmative defense."). But see Yount v. Johnson, 915 P.2d 341, 347 (N.M. App. 1996) ("[S]o-called primary assumption of risk remains with our jurisprudence as a shorthand for a judicial declaration of no duty of ordinary care, or no breach of that duty, depending on the circumstances of a particular relationship between the parties.").

⁹⁵ Yount, 915 P.2d at 346 (secondary assumption of the risk, which is "consent to a negligent breach of duty," has "merged into contributory negligence"); see Williamson, 491 P.2d at 1152 ("If pleaded and warranted by the evidence, the ground formerly occupied by the doctrine of assumption of risk will be covered by the law pertaining to negligence and contributory negligence.").

⁹⁶ See Yount, 915 P.2d at 346-47.

⁹⁷ N.Y. C.P.L.R. §§ 1411, 1412 ("Culpable conduct claimed in diminution of damages, in accordance with section fourteen hundred eleven, shall be an affirmative defense to be pleaded and proved by the party asserting the defense."); *see also Arbegast v. Board of Educ. of S. New Berlin Cent. Sch.*, 480 N.E.2d 365, 371 (N.Y. 1985) (holding that section 1411 "requires diminishment of damages in the case of an implied assumption of risk but, except as public policy proscribes an

agreement limiting liability, does not foreclose a complete defense that by express consent of the injured party no duty exists and, therefore, no recovery may be had").

- ⁹⁸ Arbegast, 480 N.E.2d at 368.
- ⁹⁹ N.Y. C.P.L.R. § 1411 ("In any action to recover damages for personal injury, injury to property, or wrongful death, the culpable conduct attributable to the claimant or to the decedent, including contributory negligence or assumption of risk, shall not bar recovery, but the amount of damages otherwise recoverable shall be diminished in the proportion which the culpable conduct attributable to the claimant or decedent bears to the culpable conduct which caused the damages.").

 100 Compare McWilliams v. Parham, 152 S.E.2d 117, 120 (N.C. 1967) ("It is well established in this jurisdiction that assumption of risk is not available as a
- defense to one not in a contractual relationship to the plaintiff."), and Fagundes v. Ammons Dev. Grp., Inc., 820 S.E.2d 350, 363 n.3 (N.C. App. 2018) (acknowledging this apparent limitation), with N.C. Gen. Stat. § 99B-4(2) ("No manufacturer or seller shall be held liable in any product liability action if: . . . [t]he user knew of or discovered a defect or dangerous condition of the product that was inconsistent with the safe use of the product, and then unreasonably and voluntarily exposed himself or herself to the danger, and was injured by or caused injury with that product.").
- ¹⁰¹ N.C. Gen. Stat. § 99B-4(2).
- ¹⁰² North Carolina does not recognize comparative fault in product liability actions. See N.C. Gen. Stat. § 99B-4(3).
- ¹⁰³ N.D. Century Code § 32-03.2-01, -02.
- 104 *Id*.
- ¹⁰⁵ Ohio R.C. § 2307.711(B)(1)-(2); Ochall v. McNamer, 79 N.E.3d 1215, 1228 (Ohio App. 2016); Morgan v. Kent State Univ., 54 N.E.3d 1284, 1288 (Ohio App. 2016).
- ¹⁰⁶ Jones v. White Motor Corp., 401 N.E.2d 223, 226-27 (Ohio App. 1978) (citation omitted).
- ¹⁰⁷ Ochall, 79 N.E.3d at 1228.
- ¹⁰⁸ Morgan, 54 N.E.3d at 1288 (citation omitted).
- ¹⁰⁹ Ohio R.C. § 2307.711(B)(3); Collier v. Northland Swim Club, 518 N.E.2d 1226, 1229 (Ohio App. 1987).
- ¹¹⁰ Morgan, 54 N.E.3d at 1288. There might be no differentiation for claims governed by Ohio R.C. § 2307.711.
- ¹¹¹ Kirkland v. General Motors Corp., 521 P.2d 1353, 1366 (Okla. 1974); Thomas v. Holliday ex rel. Holliday, 764 P.2d 165, 171 (Okla. 1988); accord Norton v. Spring Operating Co., 466 P.3d 598, 612 (Okla. Civ. App. 2019).
- 112 Holt v. Deere & Co., 24 F.3d 1289, 1293 (10th Cir. 1994) ("[A] plaintiff can 'assume the risk of a known defect' without specific, technical knowledge of the *cause* of the product's dangerous, defective condition.").
- ¹¹³ See Thomas, 764 P.2d at 171 (for assumption of the risk "to avail as a defense to a tort claim for negligence there must either be an express agreement, a pre-existing status between the defendant and plaintiff, or an element of consent to the harm that is known and appreciated by the plaintiff. Anything falling outside these areas is simply contributory negligence.") (emphasis omitted).
- ¹¹⁴ Or. Rev. Stat. § 31.620(2); *Blair v. Mt. Hood Meadows Dev. Corp.*, 630 P.2d 827, 831 (Or. 1981), *reh'g denied and opinion modified in other part*, 634 P.2d 241 (Or. 1981).
- ¹¹⁵ See Sandford v. Chevrolet Div. of Gen. Motors, 642 P.2d 624, 628 (Or. 1982).
- ¹¹⁶ Reott v. Asia Trend, Inc., 55 A.3d 1088, 1095 (Pa. 2012) (assumption of risk "is always available to a defendant in products liability case."); Bullman v. Giuntoli, 761 A.2d 566, 570-71 (Pa. Super. 2000) (negligence); Staub v. Toy Factory, Inc., 749 A.2d 522, 526-28 (Pa. Super. 2000) (negligence). But see Jara v. Rexworks Inc., 718 A.2d 788, 795 (Pa. Super. 1998) ("Where an employee, in doing a job, is required to use equipment as furnished by the employer, this defense is unavailable.").
- ¹¹⁷ Reott, 55 A.3d at 1096 (citation omitted).
- ¹¹⁸ Frey v. Harley Davidson Motor Co., Inc., 734 A.2d 1, 6 (Pa. Super. 1999) (citation omitted).
- ¹¹⁹ Sheehan v. North Am. Mktg. Corp., 610 F.3d 144, 151 (1st Cir. 2010); Walker v. Jackson, 723 A.2d 1115, 1117 (R.I. 1999).

- ¹²⁰ Sheehan, 610 F.3d at 151.
- ¹²¹ S.C. Code § 17-53-20; Davenport v. Cotton Hope Plantation Horizontal Property Regime, 508 S.E.2d 565, 571, 570-71 (S.C. 1998).
- ¹²² S.C. Code § 17-53-20.
- ¹²³ Davenport, 508 S.E.2d at 571, 573-74.
- ¹²⁴ See id. at 570-74.
- ¹²⁵ Wangsness v. Builders Cashway, Inc., 779 N.W.2d 136, 140 (S.D. 2010), superseded by statute in other part, S.D.C.L. § 19-19-701; Duda v. Phatty McGees, Inc., 758 N.W.2d 754, 757-60 (S.D. 2008).
- ¹²⁶ Wangsness, 779 N.W.2d at 140-41 (citation omitted).
- ¹²⁷ *Duda*, 758 N.W.2d at 758 (citation omitted).
- ¹²⁸ Perez v. McConkey, 872 S.W.2d 897, 900, 906 (Tenn. 1994).
- 129 *Id*.
- ¹³⁰ *Id.* at 906 (implied assumption of the risk "is abolished," and "the situations to which it applied under the former common law contributory negligence scheme are more clearly and readily amenable to analysis . . . in terms of the common-law concept of duty and by reference to principles of comparative fault").
- ¹³¹ See Del Lago Partners, Inc. v. Smith, 307 S.W.3d 762, 772 (Tex. 2010).
- ¹³² *Id.* ("We abandoned the assumption-of-the-risk doctrine as a complete defense to tort liability thirty-five years ago, holding that the Legislature's adoption of comparative negligence 'evidenced its clear intention to apportion negligence rather than completely bar recovery.") (footnote omitted).
- ¹³³ See Utah Code § 78B-5-817(2) (defining fault); Jacobsen Constr. Co., Inc. v. Structo Lite Eng'g, Inc., 619 P.2d 306, 309-12 (Utah 1980).
- ¹³⁴ Utah Code § 78B-5-817(2) (defining fault); *Jacobsen Constr.*, 619 P.2d at 309-12 ("[W]ith particular reference to our comparative negligence act, the reasonableness of plaintiff's conduct in confronting a known or unknown risk created by defendant's negligence will basically be determined under principles of contributory negligence.").
- ¹³⁵ See Dillworth v. Gambardella, 970 F.2d 1113, 1118-19 (2d Cir. 1992) (primary assumption of the risk involves dangers inherent in the activity and "properly should be framed in terms of the duty owed by a defendant"); Sunday v. Stratton Corp., 390 A.2d 398, 402-03 (Vt. 1978).
- ¹³⁶ Sunday, 390 A.2d at 404 (secondary assumption of risk, where there is "knowledge of the existence of the risk, appreciation of the extent of the danger, and consent to assume it," "is logically only a phase of contributory negligence").
- ¹³⁷ See Webb v. Navistar Int'l Transp. Corp., 692 A.2d 343, 347-50 (Vt. 1996) (lead opinion).
- ¹³⁸ See Dillworth, 970 F.2d at 1118-19; Sunday, 390 A.2d at 404.
- ¹³⁹ Thurmond v. Prince William Prof'l Baseball Club, Inc., 574 S.E.2d 246, 249 (Va. 2003) ("[A] person's voluntary assumption of the risk of injury from a known danger operates as a complete bar to recovery for a defendant's alleged negligence in causing that injury.").
- 140 *Id*.
- ¹⁴¹ Leyendecker v. Cousins, 770 P.2d 675, 678 (Wash. App. 1989).
- ¹⁴² Erie v. White, 966 P.2d 342, 345 (Wash. App. 1998) (citation omitted).
- ¹⁴³ *Leyendecker*, 770 P.2d at 678.
- ¹⁴⁴ See id.
- ¹⁴⁵ King v. Kayak Mfg. Corp., 387 S.E.2d 511, 517 (W. Va. 1989).
- ¹⁴⁶ Id at 518
- ¹⁴⁷ Polsky v. Levine, 243 N.W.2d 503, 505 (Wis. 1976); see also Dippel v. Sciano, 155 N.W.2d 55, 64 (Wis. 1967).
- ¹⁴⁸ *Polsky*, 243 N.W.2d at 505 (anything that "falls short of express consent to exposure to a particular hazard . . . constitutes contributory negligence and is subject to the comparative negligence statute").
- ¹⁴⁹ See Halpern v. Wheeldon, 890 P.2d 562, 565-66 (Wyo. 1995) (primary assumption of the risk is part of duty analysis); Wyo. Stat. § 1-1-109(a)(iv).

¹⁵⁰ Wyo. Stat. § 1-1-109(a)(iv) (defining "fault"); *Halpern*, 890 P.2d at 565 ("In Wyoming, the absolute defense of secondary assumption of risk (contributory negligence) was abolished when the Legislature adopted the comparative negligence statute.").

¹⁵¹ See Halpern, 890 P.2d at 565-66.

¹⁵² Warner Fruehauf Trailer Co., Inc. v. Boston, 654 A.2d 1272, 1274 (D.C. 1995) ("In the District of Columbia, assumption of risk by the injured party, if established, is a complete bar to recovery in a strict liability action."); accord Baldwin v. Harris Corp., 751 F. Supp. 2, 5 (D.D.C. 1990) ("Assumption of the risk is a complete bar to recovery for negligence and strict liability against a manufacturer.").

¹⁵³ *Warner Fruehauf*, 654 A.2d at 1275.

 $^{^{154}}$ *Id*.

¹⁵⁵ See Ito v. Macro Energy, Inc., 1993 WL 614805, at *9, 11-12 (N. Mar. I. Oct. 26, 1993).

¹⁵⁶ *Id.* at *11.

¹⁵⁷ Baum-Holland v. El Conquistador Partnership, L.P., S.E., 336 F. Supp. 3d 6, 22 (D.P.R. 2018); Rubio v. Southern Air Transport, Inc., 388 F. Supp. 1021, 1024 (D.P.R. 1975), aff'd, 539 F.2d 701 (1st Cir. 1976).

¹⁵⁸ Baum-Holland, 336 F. Supp. 3d at 23 (citation omitted).

¹⁵⁹ *Id.* at 22 ("Puerto Rico has adopted the concept of assumption of risk in actions for damages in its . . . secondary sense—which is actually a form of comparative negligence.")

¹⁶⁰ *Id.* at 22-23; *Rubio*, 388 F. Supp. at 1024.

¹⁶¹ Smollett v. Skayting Dev. Corp., 793 F.2d 547, 548 (3d Cir. 1986) (citation omitted).

¹⁶² *Id.*; *accord Machado v. Yacht Haven U.S.V.I.*, *LLC*, 61 V.I. 373 (2014) ("[M]aintaining implied assumption of risk as a complete defense to negligence conflicts with the Legislature's unambiguous directive in [the comparative fault statute]").

Defendants' Appendix I Variation in Sophisticated User and Related Defenses*

	Defense Recognized?	Standard	Highest Court	Analogous, Potentially Applicable Defenses ¹
Alabama	Yes. ²	Product seller "did not have a duty to provide [employer-purchaser] or its employees with a warning of a danger of which they already were , ^[3] or had reason to be, aware ."	Yes. ⁵	Sophisticated Intermediary. ⁶
Alaska	Unclear. ⁷	N/A	No.	N/A
Arizona	Yes. ⁸	"To succeed on this [sophisticated user] defense, Defendants must prove that, at the time of the injury, [Plaintiff], because of his particular position, training, experience, knowledge, or skill, knew or should have known of the product's risk, harm, or danger."	No.	N/A
Arkansas	Probably not. ¹⁰	N/A	No.	N/A
California	Yes. ¹¹	Under the sophisticated user defense, "a product manufacturer or supplier is not liable for failing to warn a sophisticated user if the user knew or should have known of the product's risk in light of his training or skill ." ¹²	Yes. ¹³	Sophisticated Intermediary. ¹⁴
Colorado	Yes. ¹⁵	"To sustain a conclusion that no duty was owed to the user on this ground [of the professional or amateur status of the user], we must find the record evidence to be undisputed that the user actually knew of the danger or that, based on the user's special expertise and the circumstances of the transaction, the supplier reasonably could have believed that he knew of the danger." ¹⁶	No.	N/A
Connecticut	Yes. ¹⁷	• When the manufacturer "has reason to believe that the purchaser of the product will recognize the dangers associated with the product, no warnings are mandated." ¹⁸	Yes. ²¹	N/A
		• Under the sophisticated user defense, an "anticipated awareness of an expected user with respect to the dangers of a particular product factors into the trier's determination of whether warnings were required and if so whether those provided were adequate." ¹⁹		
		• "the sophisticated user doctrine is a factor to be considered in determining the need for warnings and is not an affirmative defense ." ²⁰		

^{*} The analysis of state law in this document is preliminary and illustrative and should not be understood to represent the positions that Defendants will take on state law questions in this or any other case based a complete analysis of state law and the facts of particular claims.

	Defense Recognized?	Standard	Highest Court	Analogous, Potentially Applicable Defenses ¹
Delaware	Probably. ²²	Under the sophisticated user defense, a product seller has "no duty to warn if the user knows or should know of the potential danger, especially when the user is a professional who should be aware of the characteristics of the product." ²³	No.	Sophisticated Purchaser. ²⁴
Florida	Yes. ²⁵	The sophisticated user doctrine "relieve[s] a manufacturer of the duty to warn where there is a sophisticated user or learned intermediary with knowledge of the hazard." ²⁶	No.	Learned Intermediary. ²⁷
Georgia	Yes. ²⁸	Under the sophisticated user doctrine, "[w]here the product is vended to a particular group or profession, the manufacturer is not required to warn against risks generally known to such group or profession." ²⁹	No.	N/A
Hawaii	Unclear. ³⁰	N/A	No.	N/A
Idaho	Unclear.31	N/A	No.	N/A
Illinois	Probably. ³²	An Illinois appellate court has found no duty to warn where the user had "actual knowledge" and was "aware of the hazards" with the product. ³³	No.	N/A
Indiana	Yes. ³⁴	"The sophisticated-user defense typically exempts a manufacturer from providing warnings about a product's potential dangers when the users of the product are—or should be—already aware of them ."35	Yes. ³⁶	Sophisticated Intermediary. ³⁷
Iowa	Yes. ³⁸	Under the sophisticated user doctrine, "a manufacturer has no duty to warn if the user knows or should know of the potential danger , especially when the user is a professional who should be aware of the characteristics of the product." ³⁹	No.	Sophisticated Intermediary ⁴⁰
Kansas	Yes. ⁴¹	"In any product liability claim any duty on the part of the manufacturer or seller of the product to warn or protect against a danger or hazard which could or did arise in the use or misuse of such product, and any duty to have properly instructed in the use of such product shall not extend: (a) To warnings, protecting against or instructing with regard to those safeguards , precautions and actions which a reasonable user or consumer of the product, with the training , experience , education and any special knowledge the user or consumer did, should or was required to possess, could and should have taken for such user or consumer or others, under all the facts and circumstances."	N/A (Statute)	N/A
Kentucky	Unclear.43	N/A	No.	N/A

	Defense Recognized?	Standard	Highest Court	Analogous, Potentially Applicable Defenses ¹
Louisiana	Yes. ⁴⁴	"A manufacturer is not required to provide an adequate warning about his product when [t]he user or handler of the product already knows or reasonably should be expected to know of the characteristic of the product that may cause damage and the danger of such characteristic."	N/A (Statute)	Sophisticated Purchaser. ⁴⁶
Maine	No. ⁴⁷	N/A	Yes. ⁴⁸	Sophisticated Purchaser. ⁴⁹
Maryland	Yes. ⁵⁰	"Under the sophisticated user doctrine a manufacturer is insulated from liability for injuries allegedly arising out of the manufacturer's failure to warn if the purchaser was a 'knowledgeable industrial user who has reason to know of any dangerous condition which might be inherent in the product."	Yes. ⁵²	N/A
Massachusetts	Yes. ⁵³	"According to the 'sophisticated user' defense, there is no duty to warn an 'end user' of a product's latent characteristics or dangers when the user knows or reasonably should know of those dangers." ⁵⁴	Yes. ⁵⁵	N/A
Michigan	Yes. ⁵⁶	• "Except to the extent a state or federal statute or regulation requires a manufacturer to warn, a manufacturer or seller is not liable in a product liability action for failure to provide an adequate warning if the product is provided for use by a sophisticated user ." ⁵⁷	N/A (Statute)	N/A
		• A "sophisticated user" is defined as "a person or entity that, by virtue of training , experience , a profession , or legal obligations , is or is generally expected to be knowledgeable about a product's properties, including a potential hazard or adverse effect. An employee who does not have actual knowledge of the product's potential hazard or adverse effect that caused the injury is not a sophisticated user."58		
		• Case law provides that to "prevail under a sophisticated user defense, the defendant seller must show that the user had full knowledge of the defect, and that the user should be expected to know of the defect's dangerous characteristics ." ⁵⁹		
Minnesota	Yes. ⁶⁰	"Under the sophisticated user defense, a supplier has no duty to warn the ultimate user if it has reason to believe that the user will realize its dangerous condition."	Yes. ⁶²	Sophisticated Intermediary. ⁶³

	Defense Recognized?	Standard	Highest Court	Analogous, Potentially Applicable Defenses ¹
Mississippi	Yes. ⁶⁴	• Common Law: "The common law defense provides that when a manufacturer provides information to a third party upon whom it can reasonably rely to communicate that information to the ultimate end user or those parties who will be exposed to the product's hazardous effects, its duty to warn may be discharged." 65	Yes. ⁶⁷	Learned Intermediary. ⁶⁸
		• Statutory: "The statutory sophisticated-user defense provides that the manufacturer is not liable 'if the danger posed by the product is known to the user or consumer of the product, or should have been known to the user or consumer of the product, taking into account the characteristics of, and the ordinary knowledge common to, the persons who ordinarily use or consume the product."		
Missouri	Yes. ⁶⁹	"If the user of a product knows or reasonably may be expected to know of a particular danger, strict liability will not result from a failure to warn of that danger."	No.	N/A
Montana	Unclear. ⁷¹	N/A	No.	N/A
Nebraska	Yes. ⁷²	 "Under the sophisticated user defense, a supplier has no duty to warn the ultimate user if it has reason to believe that the user will realize its dangerous condition."⁷³ Under Nebraska law, "the 'sophisticated user' concept also affects the element of 	Yes. ⁷⁵	N/A
		proximate cause." ⁷⁴		
Nevada	Unclear. ⁷⁶	N/A	No.	N/A
New Hampshire	Unclear. ⁷⁷	N/A	No.	N/A
New Jersey	Yes. ⁷⁸	• "A manufacturer may argue that only persons with specialized training could reasonably be expected to use a product. In such cases, the manufacturer's duty 'is owed only to the reasonably-anticipated sophisticated user , not the untrained interloper ."	No.	N/A
		• Defense may apply to only negligence , and not strict liability, actions. ⁸⁰		
New Mexico	Probably.81	"The sophisticated-user defense precludes liability for failure to warn when the <i>user</i> of a product knows or reasonably may be expected to know of a particular danger."82	No.	Sophisticated Purchaser. ⁸³

	Defense Recognized?	Standard	Highest Court	Analogous, Potentially Applicable Defenses ¹
New York	Yes. ⁸⁴	"where the injured party was fully aware of the hazard through general knowledge, observation or common sense," "courts could as a matter of law decide that a manufacturer's warning would have been superfluous given an injured party's actual knowledge of the specific hazard that caused the injury."	Yes. ⁸⁶	N/A
North Carolina	Probably not.87	N/A	No.	N/A
North Dakota	Unclear.88	N/A	No.	N/A
Ohio	Probably.89	"Under the 'bulk supplier/sophisticated user,' or 'knowledgeable purchaser,' doctrine, a manufacturer can discharge its duty to warn by providing the necessary information to an intermediary upon whom it can reasonably rely to communicate the information to the ultimate user of the product [w]here a manufacturer raises a bulk supplier/sophisticated user defense, the pivotal question becomes the reasonableness of the supplier's reliance on the intermediary to provide the necessary warning."	No. ⁹¹	N/A
Oklahoma	Yes. ⁹²	Under the "sophisticated user defense," "where a product is used in an industrial setting by one supposedly skilled at his job , a manufacturer has 'no duty to warn of dangers inherent in the task or which are created by oversight or negligence of the contractor or fellow employees." "93	Yes. ⁹⁴	N/A
Oregon	Unclear.95	N/A	No.	Sophisticated Intermediary. ⁹⁶
Pennsylvania	No. ⁹⁷	N/A	No.	N/A
Rhode Island	Unclear.98	N/A	No.	N/A
South Carolina	No. ⁹⁹	N/A	Yes. ¹⁰⁰	N/A
South Dakota	Unclear. ¹⁰¹	N/A	No.	N/A
Tennessee	Unclear. ¹⁰²	N/A	No	Sophisticated Manufacturer Defense. ¹⁰³
Texas	Yes. ¹⁰⁴	Under the sophisticated user doctrine or defense, "a product supplier should not be required to warn knowledgeable customers or their employees of risks of use." ¹⁰⁵	Yes. ¹⁰⁶	N/A

	Defense Recognized?	Standard	Highest Court	Analogous, Potentially Applicable Defenses ¹
Utah	Yes. ¹⁰⁷	• "To avoid liability because the injured party was a sophisticated user, defendants must show that the 'ultimate user possesses special knowledge , sophistication , or expertise ' to such an extent that 'the user's knowledge of the danger is equivalent to prior notice ." 108	Yes. ¹¹⁰	N/A
		• To "sustain a conclusion that no duty was owed to the user because of his professional status, the court must 'find the record evidence to be undisputed that the user actually knew of the danger or that, based on the user's special expertise and the circumstances of the transaction, the supplier reasonably could have believed that he knew of the danger ." 109		
Vermont	Unclear.111	N/A	No.	N/A
Virginia	Yes. ¹¹²	"Simply stated, the sophisticated user defense may be permitted in cases involving an employer who was aware of the inherent dangers of a product which the employer purchased for use in its business. Such an employer has a duty to warn his employees of the dangers of the product, and the manufacturer is absolved of any concurrent duty to warn those same employees."	No. ¹¹⁴	Sophisticated Purchaser. ¹¹⁵
Washington	No. ¹¹⁶	N/A	Yes. ¹¹⁷	N/A
West Virginia	Probably. ¹¹⁸	• Under the sophisticated user defense, the "manufacturer must offer proof that it was [] aware of the employer's sophistication and that this awareness translated into reasonable reliance." 119	No.	N/A
		• The "sophisticated user doctrine is inapplicable in situations where members of the public are unintentionally exposed to hazardous chemicals ." ¹²⁰		
Wisconsin	Yes. ¹²¹	The sophisticated user defense can shield "manufacturers from liability for negligent failure to warn where the manufacturer has reason to believe that a user has the knowledge necessary to realize the dangerous condition of the product." 122	No. ¹²⁴	N/A
		• The "'sophisticated user' defense applies only to negligence claims ." ¹²³		
Wyoming	Unclear. ¹²⁵	N/A	No.	N/A
District of Columbia	Yes. ¹²⁶	Under the "experienced user" exception, the courts asks "whether the user, by virtue of his profession and experience, knew or should have known of the latent danger."	Yes. ¹²⁸	N/A

	Defense Recognized?	Standard	Highest Court	Analogous, Potentially Applicable Defenses ¹
Guam	Unclear. ¹²⁹	N/A	No.	N/A
Northern Mariana Islands	Unclear. ¹³⁰	N/A	No.	N/A
Puerto Rico	Unclear. ¹³¹	N/A	No.	Sophisticated Buyer. ¹³²
Virgin Islands	Probably. ¹³³	"The sophisticated user defense only applies in situations where the ultimate user actually possessed 'special knowledge, sophistication, or expertise in relation to the product."	No.	Sophisticated Intermediary. ¹³⁵

¹ This identification of analogous, potentially applicable defenses is not intended to be comprehensive. For defenses focused on bulk suppliers, *see* Defendants' Appendix J, filed concurrently.

² Ex parte Chevron Chem. Co., 720 So. 2d 922, 926 (Ala. 1998).

³ In this exhibit, the **bold** in any quotation has been added for emphasis.

⁴ Ex parte Chevron, 720 So. 2d at 926.

⁵ *Id*.

⁶ Purvis v. PPG Industries, Inc., 502 So. 2d 714, 722 (Ala. 1987) ("Whether because of bulk sales, repackaging, or product combinations, these manufacturers must rely upon downstream distributors and suppliers to do this. The law has properly evolved to the point where such reliance is permitted, so long as the manufacturer has a reasonable basis to believe that the distributor will pass along the product information or warnings.").

⁷ No authority located.

⁸ Ashford v. Accuwright Industries, Inc., 2020 WL 950217, at *7 (Ariz. Ct. App. Feb. 27, 2020) (unpublished).

⁹ *Id*.

¹⁰ Russell v. Ashland, Inc., 574 F. Supp. 2d 957, 958 (W.D. Ark. 2008) (declining to apply "sophisticated user" doctrine and noting that "Arkansas has not adopted § 388 of the Restatement (Second) of Torts").

¹¹ Webb v. Special Elec. Co., 63 Cal. 4th 167, 182, 370 P.3d 1022, 1031 (2016).

 $^{^{12}}$ *Id*.

¹³ *Id*.

¹⁴ Webb, 63 Cal. 4th at 187, 370 P.3d at 1034 (under the sophisticated intermediary doctrine, "a supplier may discharge its duty to warn end users about known or knowable risks in the use of its product if it: (1) provides adequate warnings to the product's immediate purchaser, or sells to a sophisticated purchaser that it knows is aware or should be aware of the specific danger, *and* (2) reasonably relies on the purchaser to convey appropriate warnings to downstream users who will encounter the product.").

¹⁵ Halter v. Waco Scaffolding & Equip. Co., 797 P.2d 790, 794 (Colo. App. 1990).

¹⁶ *Id*.

¹⁷ Sharp v. Wyatt, Inc., 627 A.2d 1347, 1359-60 (Conn. App. Ct. 1993), aff'd, 644 A.2d 871 (Conn. 1994).

¹⁸ *Id*.

¹⁹ *Id*.

²⁰ Sharp v. Wyatt, Inc., 644 A.2d 871, 873 (Conn. 1994).

²¹ *Id*.

²² Smith v. Henry S. Branscome, Inc., 2004 WL 2323634, at *6 (D. Del. Oct. 8, 2004), aff'd, 161 F. App'x 212 (3d Cir. 2006) (unpublished) (predicting that Delaware would adopt the "sophisticated user" defense).

²³ *Id.* (italics omitted).

²⁴ Ramsey v. Georgia S. Univ. Adv. Dev. Ctr., 189 A.3d 1255, 1280-81 (Del. 2018) ("Under Delaware's 'sophisticated purchaser' defense, and subject to the requirements of reasonableness and good faith, a manufacturer may satisfy its duty to warn the employee by relying on a warning it conveyed to the employer and the employer's independent duty to warn the employee.").

²⁵ Pike v. Trinity Industries, Inc., 34 F. Supp. 3d 1193, 1199-1200 (M.D. Fla. 2014) (noting that Florida law "recognizes the 'sophisticated user' or 'learned intermediary' doctrines" and treating them interchangeably).

²⁶ *Id*.

³³ *Id*.

³⁵ *Id*.

³⁶ *Id*.

³⁹ *Id*.

⁴² *Id*.

⁴⁵ *Id*.

²⁷ *Aubin v. Union Carbide Corp.*, 177 So. 3d 489, 515 (Fla. 2015) ("a manufacturer may be able to rely on an intermediary to relay warnings to the end user, but the critical inquiry is whether the manufacturer was reasonable in relying on the intermediary to fully warn the end user and whether the manufacturer fully warned the intermediary of the dangers in its product.").

²⁸ Parker v. Schmiede Mach. & Tool Corp., 445 F. App'x 231, 235 (11th Cir. 2011).

²⁹ *Id.* (grouping "sophisticated user" and "learned intermediary" defense together under Georgia law); *see also Hill v. Konecranes*, Inc., 2020 WL 3259178, at *19 (S.D. Ga. June 16, 2020) ("The sophisticated user doctrine 'applies where it appears that the person using the product should know of the danger, or should in using the product discover the danger."").

³⁰ No authority located; cf. Tabieros v. Clark Equip. Co., 944 P.2d 1279, 1306 n.17 (Haw. 1997) (referring to doctrine but not adopting or analyzing it).

³¹ No authority located; *cf. Robinson v. Williamsen Idaho Equip. Co.*, 94 Idaho 819, 827, 498 P.2d 1292, 1300 (Idaho 1972) (noting that a "protection afforded through the warning must be reasonably coextensive with the danger, in light of the user's experience with the product.").

³² Collins v. Hyster Co., 174 Ill. App. 3d 972, 980, 529 N.E.2d 303, 308 (1988).

³⁴ Brewer v. PACCAR, Inc., 124 N.E.3d 616, 626 (Ind. 2019).

³⁷ First Nat. Bank & Tr. Corp. v. Am. Eurocopter Corp., 378 F.3d 682, 691 (7th Cir. 2004) (under Indiana law, the sophisticated intermediary defense applies if "(1) the product is sold to an intermediary with knowledge or sophistication equal to that of the manufacturer; (2) the manufacturer adequately warns this intermediary; and (3) the manufacturer can reasonably rely on the intermediary to warn the ultimate consumer."); see also Nat. Gas Odorizing, Inc. v. Downs, 685 N.E.2d 155, 163 (Ind. Ct. App. 1997) (on sophisticated intermediary defense under Indiana law).

³⁸ Linden v. CNH Am., LLC, 673 F.3d 829, 836 (8th Cir. 2012) (internal quotation marks omitted) (applying Iowa law).

⁴⁰ Daughetee v. Chr. Hansen, Inc., 960 F. Supp. 2d 849, 869-71 (N.D. Iowa 2013) (discussing "intermediary" defense).

⁴¹ Kan. Stat. Ann. § 60-3305.

⁴³ No authority located.

⁴⁴ La. Stat. Ann. 9:2800.57.

⁴⁶ Fernandez v. Tamko Bldg. Prods., Inc., 2 F. Supp. 3d 854, 864 (M.D. La. 2014), on reconsideration in part (Apr. 11, 2014), aff'd, 588 F. App'x 394 (5th Cir. 2014) (unpublished) ("Similarly, a manufacturer has no duty to warn a sophisticated purchaser. Louisiana does not hold that a manufacturer is compelled to warn sophisticated purchasers of dangers of which the buyer either knows or should be aware." (internal quotation marks and alterations omitted) (emphasis in original)).

⁴⁷ *Grant v. Foster Wheeler, LLC*, 2016 ME 85, ¶ 9 n.4, 140 A.3d 1242, 1245 n.4 (Me. 2016) ("NEI also argued that its duty to warn Edward Grant of any danger present in Kaylo was relieved by the sophisticated user doctrine, an affirmative defense not yet recognized in Maine.").

⁴⁸ *Id.*

⁴⁹ *Unicomp, Inc. v. Elementis Pigments, Inc.*, 1999 WL 1995400, at *19 (D. Me. Feb. 10, 1999) (predicting adoption of sophisticated purchaser defense, under which "no duty to warn arises when material is sold to a 'sophisticated purchaser,' *i.e.*, one that knew or should have known of the risk involved.").

⁵⁰ Miller Metal Fabrication, Inc. v. Wall, 415 Md. 210, 216 n.6, 999 A.2d 1006, 1010 n.6 (2010) (noting that the "Court has not expressly applied the doctrine, but has affirmed, in a summary order, judgment of the Court of Special Appeals in a case applying the doctrine.").

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<sup>51</sup> Id.
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⁵² *Id*.

⁵³ Taylor v. Am. Chemistry Council, 576 F.3d 16, 24 (1st Cir. 2009) (applying Massachusetts law).

⁵⁴ *Id*.

⁵⁵ Carrel v. Nat'l Cord & Braid Corp., 447 Mass. 431, 440, 852 N.E.2d 100, 108 (Mass. 2006).

⁵⁶ Mich. Comp. Laws § 600.2947(4).

⁵⁷ *Id*.

⁵⁸ Mich. Comp. Laws § 600.2945(j).

⁵⁹ Wendorf v. JLG Indus., Inc., 683 F. Supp. 2d 537, 547 (E.D. Mich. 2010) (applying Michigan law).

⁶⁰ Gray v. Badger Min. Corp., 676 N.W.2d 268, 277 (Minn. 2004) (discussing defense but stating that "we need not determine the precise applicability or scope of the sophisticated user defense").

⁶¹ *Id*. at 276.

⁶² *Id*.

⁶³ *Id.* at 277 ("In circumstances where it is highly impractical for the supplier to provide a warning directly to the end user, a variation of the sophisticated user defense has been developed that focuses on the sophistication of the end user's employer, on the premise that the employer will act in the best interest of its employees. For ease of analysis, we will refer to this as a separate 'sophisticated intermediary' defense. It is often joined with the 'bulk supplier' defense because bulk delivery presents one circumstance where direct warnings are impractical.").

⁶⁴ Mississippi Valley Silica Co. v. Eastman, 92 So. 3d 666, 671 (Miss. 2012) ("Mississippi recognizes both a statutory and the common-law 'sophisticated-user' defense.").

⁶⁵ Union Carbide Corp. v. Nix, Jr., 142 So. 3d 374, 386 (Miss. 2014) (italics omitted).

⁶⁶ *Id*.

⁶⁷ *Id*.

⁶⁸ *Id.* at 385-86 ("[C]ourts and litigants often use the terms 'learned intermediary' and 'sophisticated user' interchangeably. The 'sophisticated-user' terminology is more appropriate where the injured ultimate user is aware of the product's hazards, while the 'learned intermediary' terminology more aptly describes the situation in which the intermediate purchaser is knowledgeable, but the injured ultimate user is ignorant of the product's hazards. '[T]he context and facts of a particular case will dictate which label is appropriate, regardless of the label actually used."' (internal quotation marks and citation omitted)).

⁶⁹ Donner v. Alcoa Inc., 2015 WL 12778354, at *3 n.7 (W.D. Mo. Jan. 9, 2015) (describing "sophisticated/reasonable user doctrine" under Missouri law).

⁷⁰ *Id*.

⁷¹ No authority located.

⁷² Vondra v. Chevron U.S.A., Inc., 652 F. Supp. 2d 999, 1006 (D. Neb. 2009).

 $^{^{73}}$ *Id*.

⁷⁴ *Id*.

⁷⁵ Erickson v. Monarch Industries, Inc., 216 Neb. 875, 886, 347 N.W.2d 99, 108 (Neb. 1984) ("warning of a product's defects is unnecessary where the supplier of the product has 'reason to believe that those who will . . . use it will have such special experience as will enable them to perceive the danger ").

⁷⁶ No authority located.

⁷⁷ No authority located.

⁷⁸ McGarvey v. G.I. Joe Septic Serv., Inc., 293 N.J. Super. 129, 147, 679 A.2d 733, 743 (N.J. Super. App. Div. 1996).

⁷⁹ *Id.* (describing the "sophisticated user" defense).

⁸⁰ Perlman v. Virtua Health, Inc., 2005 WL 1038953, at *8 (D.N.J. May 3, 2005).

⁸¹ Bellman v. NXP Semiconductors USA, Inc., 248 F. Supp. 3d 1081, 1142 (D.N.M. 2017) ("the Court is confident that the Supreme Court of New Mexico would recognize the sophisticated-user and sophisticated-purchaser defenses in a negligent failure-to-warn case.").

⁸² *Id.* at 1144 (internal quotation marks omitted).

⁸³ *Id.* at 1146 ("The sophisticated-purchaser defense precludes liability for failure to warn 'employees or customers of knowledgeable industrial purchasers as to product-related hazards."").

⁸⁴ Newell v. Ryobi Techs., Inc., 2015 WL 4617184, at *6 (S.D.N.Y. Aug. 3, 2015) (referring to "knowledgeable user exception").

⁸⁵ Liriano v. Hobart Corp., 92 N.Y.2d 232, 241, 700 N.E.2d 303, 308 (N.Y. 1998).

⁸⁶ *Id*.

⁸⁷ Finch v. Covil Corp., 388 F. Supp. 3d 593, 608 (M.D.N.C. 2019), aff'd, 972 F.3d 507 (4th Cir. 2020) ("North Carolina does not appear to have adopted the 'sophisticated user' defense, whereby a manufacturer is absolved of any duty to warn employees directly when a product is sold to an employer who is aware of its dangers."); but see Ziglar v. E. I. Du Pont De Nemours and Co., 53 N.C. App. 147, 153, 280 S.E.2d 510, 515 (N.C. Ct. App. 1981) ("there is simply no compelling reason to require a seller 'to warn a person who in his occupation or profession regularly uses the product against any risk that should be known to such a regular user.").

⁸⁸ DJ Coleman, Inc. v. Nufarm Americas, Inc., 693 F. Supp. 2d 1055, 1077-78 (D.N.D. 2010) (discussing doctrine but not adopting it).

⁸⁹ Midwest Specialties, Inc. v. Crown Indus. Products, Co., 142 F.3d 435, 1998 WL 109978, at *1 (6th Cir. 1998) (unpublished table decision) ("Although the Ohio courts have adopted the Restatement (Second) of Torts, and specifically § 388 of the Restatement, they have not spoken expressly to the applicability of the 'sophisticated user' defense in comment n. Nevertheless, the federal courts in this circuit have applied the defense in Ohio cases, to this point without comment or correction by the Ohio Supreme Court."); Eastman v. Stanley Works, 2009-Ohio-634, ¶51, 907 N.E.2d 768, 782 (Ohio Ct. App. 2009) ("Our research reveals that only one Ohio court has ever mentioned the 'sophisticated user' doctrine, and that court described it thusly: 'The sophisticated or knowledgeable purchaser defense is invoked in cases involving suppliers of dangerous products to industrial companies."").

⁹⁰ Midwest Specialties, Inc. v. Crown Indus. Products Co., 940 F. Supp. 1160, 1165 (N.D. Ohio 1996), aff'd sub nom. Midwest Specialties, Inc. v. Crown Indus. Products, Co., 142 F.3d 435 (6th Cir. 1998).

⁹¹ But see Temple v. Wean United, Inc., 50 Ohio St. 2d 317, 325, 364 N.E.2d 267, 272 (Ohio 1977) ("Manifestly, it would be futile to require that Square D notify the employee of that which the responsible party, the employer, was already aware.").

⁹² Lee v. Carbonyx, Inc., 2014 WL 198342, at *7 n.3 (E.D. Okla. Jan. 14, 2014).

⁹³ *Id*.

⁹⁴ Duane v. Oklahoma Gas & Elec. Co., 833 P.2d 284, 286 (Okla. 1992) ("there is no duty to warn a knowledgeable user of the product of the dangers associated therewith.").

⁹⁵ No authority located.

⁹⁶ Schleining v. Chicago Pneumatic Tool Co., 2006 WL 696309, at *4 (D. Or. Mar. 15, 2006) ("The doctrine acknowledges a defendant may satisfy its duty to warn by providing a warning to an intermediary such as an employer or contractor.").

⁹⁷ Amato v. Bell & Gossett, 116 A.3d 607, 624 (Pa. Super. Ct. 2015) ("the sophisticated user defense has never been adopted in Pennsylvania"); Chin v. New Flyer of Am., Inc., 169 A.3d 689, 702 (Pa. Commw. Ct. 2017) ("the sophisticated user/purchaser doctrine is not the law in Pennsylvania").

⁹⁸ No authority located.

⁹⁹ *Grimes v. Young Life, Inc.*, 2017 WL 10663785, at *4 (D.S.C. May 10, 2017) ("The South Carolina Supreme Court has not formally adopted the sophisticated user doctrine. However, other courts have applied the sophisticated user and learned intermediary doctrine in cases involving the application of South Carolina law.") (internal citation omitted).

¹⁰⁴ Humble Sand & Gravel, Inc. v. Gomez, 146 S.W.3d 170, 194 (Tex. 2004).

¹⁰⁵ *Id*.

¹⁰⁶ Id.

¹⁰⁷ House v. Armour of Am., Inc., 929 P.2d 340, 345 (Utah 1996).

¹⁰⁸ *Id*.

¹⁰⁹ *Id*.

¹¹⁰ *Id*.

- ¹¹³ Willis v. Raymark Industries, Inc., 905 F.2d 793, 796 (4th Cir. 1990) (applying Virginia law).
- ¹¹⁴ But see Morgen Industries, Inc. v. Vaughan, 471 S.E.2d 489, 493 (Va. 1996) (referring to defense but not expressly adopting it).
- ¹¹⁵ Fisher v. Monsanto Co., 863 F. Supp. 285, 287 (W.D. Va. 1994) ("when the supplier has reason to believe that the purchaser of the product will recognize the dangers associated with the product, no warnings are mandated.").
- ¹¹⁶ Rublee v. Carrier Corp., 192 Wash. 2d 190, 208, 428 P.3d 1207, 1216 n.7 (Wash. 2018) ("Washington courts have uniformly rejected a sophisticated user defense, under which product distributors are not required to instruct or warn sophisticated users about certain risks because such users are presumably already aware of the risks due to their expertise or sophistication.").

¹¹⁷ *Id*.

¹²² *Id*.

¹⁰⁰ Lawing v. Univar, USA, Inc., 415 S.C. 209, 226, 781 S.E.2d 548, 557 (S.C. 2015) ("We agree that prior to the court of appeals' opinion in this case, neither this Court, nor the court of appeals, had explicitly adopted the defense. However, we need not formally adopt the doctrine at this time because as discussed, *infra*, the facts of this case do not implicate the sophisticated user defense.").

¹⁰¹ Mann v. Lincoln Elec. Co., 2010 WL 4117417, at *4 (N.D. Ohio Oct. 15, 2010) (discussing "sophisticated user" defense under South Dakota law but reaching no clear conclusions).

¹⁰² See Pittman v. Upjohn Co., 890 S.W.2d 425, 430 (Tenn. 1994) (stating in the context of pharmaceutical sales: "Where a product is marketed solely to professionals experienced in using the product, the manufacturer may rely on the knowledge that a reasonable professional would apply in using the product."); Nye v. Bayer Cropscience, Inc., 347 S.W.3d 686, 690 n.4 (Tenn. 2011) (discussing but not adopting doctrine).

¹⁰³ Morgan v. Brush Wellman, Inc., 165 F. Supp. 2d 704, 718 (E.D. Tenn. 2001) ("Defendants also claim that the plaintiffs' claims are barred by the sophisticated manufacturer defense. Under Tennessee law, a supplier may reasonably rely on a sophisticated purchaser to warn users about the dangers of its products. A manufacturer is relieved of its duty to warn when goods are sold to such a sophisticated user. This defense applies whether the cause of action is based on strict liability, breach of warranty, or negligence.").

¹¹¹ No authority located; *cf. Wilson v. Glenro, Inc.*, 2012 WL 1005007, at *8 (D. Vt. Mar. 23, 2012), *aff'd*, 524 Fed. Appx. 739 (2d Cir. 2013) (unpublished) (finding sophistication of consumer relevant in duty analysis).

¹¹² Willis v. Raymark Industries, Inc., 905 F.2d 793, 796 (4th Cir. 1990) ("Virginia recognizes the sophisticated user defense."); cf. Reibold v. Simon Aerials, Inc., 859 F. Supp. 193, 200 (E.D. Va. 1994) ("While this Court could find no Virginia case explicitly adopting the sophisticated user doctrine, a number of previous federal cases interpreting Virginia law have so held.").

¹¹⁸ Good v. Am. Water Works Co., Inc., 2016 WL 5402238, at *5 (S.D.W. Va. Sept. 26, 2016) ("The West Virginia Supreme Court of Appeals has not expressly adopted the sophisticated user doctrine, although in *Roney* the district court concluded that the West Virginia Supreme Court likely would adopt the defense in applying comment n to § 388 of the Restatement (Second) of Torts.").

¹¹⁹ Roney v. Gencorp, 654 F. Supp. 2d 501, 507 (S.D.W. Va. 2009).

¹²⁰ Good, 2016 WL 5402238, at *5.

¹²¹ Burton v. Am. Cyanamid Co, 441 F. Supp. 3d 705, 718 (E.D. Wis. 2020), appeal filed, No. 20-1781 (7th Cir. May 11, 2020).

¹²³ *Id*.

¹²⁵ No authority located.

¹²⁶ E. Penn Mfg. Co. v. Pineda, 578 A.2d 1113, 1120 (D.C. 1990).

 127 *Id*.

¹²⁸ *Id*.

¹²⁹ No authority located.

¹³⁰ No authority located.

¹³¹ No authority located.

¹³² Torres v. Nat'l. Starch and Chem. Corp., 896 F. Supp. 71, 73 (D.P.R. 1995) ("the product manufacturer owes no duty to the employee of a purchaser if the manufacturer provides an adequate warning of any inherent dangers to the purchaser or if the purchaser has knowledge of those dangers and the duty to warn its employees thereof.").

¹³³ In re Manbodh Asbestos Litig. Series, 47 V.I. 215, 246, 2005 WL 3487838, at *11 & n.37 (V.I. Super. Nov. 28, 2005) (noting "widespread approval" of sophisticated user defense).

¹³⁴ In re Manbodh Asbestos Litig. Series, 47 V.I. at 245 n.36, 2005 WL 3487838, at *14 n.36.

¹³⁵ In re Manbodh Asbestos Litig. Series, 47 V.I. at 240-41, 2005 WL 3487838, at *11 ("The defense bars recovery where a defendant has adequately warned a sophisticated intermediary and reasonably relied on the conveyance of that warning to the ultimate users of the product.").

¹²⁴ But see Shawver v. Roberts Corp., 90 Wis. 2d 672, 686, 280 N.W.2d 226, 233 (Wis. 1979) ("Ordinarily there is no duty to warn members of a trade or profession about dangers generally known to that trade or profession.").

Defendants' Appendix J Variation in Bulk Supplier and Related Defenses*

	Defense Recognized?	Intermediary Considerations	Product Considerations	Other Considerations	Highest Court
Alabama	Yes. ¹ [Bulk Manufacturer]	"Whether because of bulk sales, repackaging, or product combinations, these manufacturers must rely upon downstream distributors and suppliers to [warn the ultimate consumer]. The law has properly evolved to the point where such reliance is permitted, so long as the manufacturer has a reasonable basis to believe ^[2] that the distributor will pass along the product information or warnings."	N/A	N/A	Yes. ⁴
Alaska	Unclear. ⁵	N/A	N/A	N/A	No
Arizona	Yes. ⁶ [Bulk Supplier]	"This doctrine protects a bulk supplier from the usual duty to provide the eventual consumer of a product with warnings of dangers associated with the product. The protection arises if the bulk supplier warns its immediate purchaser with the intention that such warning be given to the ultimate consumer."	No "need to rely on the bulk supplier defense" where "there was no reason for [supplier] to believe that it was supplying a product likely to be dangerous for the use for which it was supplied nor was [product] defective or unreasonably dangerous."8	N/A	No.

^{*} The analysis of state law in this document is preliminary and illustrative and should not be understood to represent the positions that Defendants will take on state law questions in this or any other case based a complete analysis of state law and the facts of particular claims.

	Defense Recognized?	Intermediary Considerations	Product Considerations	Other Considerations	Highest Court
Arkansas	Yes. ⁹ [Component Parts Supplier]	"suppliers of inherently safe component parts are not responsible for accidents that result when the parts are integrated into a larger system that the component-part supplier did not design or build If the component-parts manufacturer does not participate in the integration of the component into the finished product, it is not liable for defects in the final product if the component itself is not defective." ¹⁰	Doctrine applies to "inherently safe" component parts. 11	N/A	Yes. ¹²
California	Yes. ¹³ [Bulk Supplier]	 The material must be sold in bulk to a "sophisticated buyer." ¹⁴ The material must be "substantially changed during the manufacturing of a finished product." ¹⁵ The supplier must have a "limited role in creating the finished product." ¹⁶ 	"bulk supplier defense applies only to raw materials that are not inherently dangerous." 17	N/A	Yes. ¹⁸
Colorado	Unclear.19	N/A	N/A	N/A	No.
Connecticut	Yes. ²⁰ [Component Part Supplier]	The "obligation that generates the duty to avoid injury to another which is reasonably foreseeable does not—at least yet—extend to anticipation of how manufactured components not in and of themselves dangerous or defective can become potentially dangerous dependent upon the nature of their integration into a unit designed, assembled, installed, and sold by another." ²¹	 Defense applies when "the defendant has sold an item that is only a component of the product that allegedly caused the plaintiff's injury."²² Component product cannot be "in and of [itself] dangerous or defective."²³ 	N/A	No.
Delaware	Yes. ²⁴ [Component Part Manufacturer]	"a manufacturer who merely supplies a component part subsequently assembled by another in a manner creating a dangerous condition is not liable to one injured thereby." 25	Component part cannot be "defective." ²⁶	N/A	No.

	Defense Recognized?	Intermediary Considerations	Product Considerations	Other Considerations	Highest Court
Florida	Yes. ²⁷ [Bulk Supplier]	 "the duty to warn can be discharged if the supplier passes the necessary information and warnings to manufacturers of the product's dangerous condition."²⁸ Intermediary must have "knowledge of the danger."²⁹ Consider "the intensity and form of the warnings given" to the intermediary.³⁰ Consider "the likelihood that the warnings will be adequately communicated to the foreseeable users of the product."³¹ 	 Consider "the dangerous nature of the product."³² Consider "the form in which the product is used."³³ 	Consider "the burdens to be imposed by requiring warnings." ³⁴	No. ³⁵
Georgia	Yes. ³⁶ [Bulk Supplier]	 "a supplier's duty to warn an ultimate consumer can be discharged by a warning given to an intermediary party."³⁷ Consider "the likelihood that the intermediary will provide a warning" and the "likely efficacy of such a warning."³⁸ 	 Consider "the degree of danger posed by the absence of such a warning."³⁹ Consider "the nature of the potential harm."⁴⁰ 	Consider "the burden of requiring a warning" on the supplier. ⁴¹	No.
Hawaii	Yes. ⁴² [Bulk Supplier]	 Consider "the form of any warnings given" to the intermediary.⁴³ Consider "the reliability of the third party as a conduit of necessary information about the product."⁴⁴ 	 Consider "the dangerous condition of the product."⁴⁵ Consider "the purpose for which the product is used."⁴⁶ Consider "the magnitude of the risk involved."⁴⁷ 	Consider "the burdens imposed on the supplier by requiring that he directly warn all users." ⁴⁸	No.
Idaho	Yes. ⁴⁹ [Component Part Manufacturer]	 "the component manufacturer must give an <i>adequate</i> warning" to the intermediary."⁵⁰ "in every circumstance the reliance on the intermediary must be reasonable."⁵¹ 	N/A	N/A	Yes. ⁵²

	Defense Recognized?	Intermediary Considerations	Product Considerations	Other Considerations	Highest Court
Illinois	Yes. ⁵³ [Bulk Supplier]	 "a supplier has a duty to supply adequate warnings to its immediate vendee, and may be held liable to the ultimate user for its failure to do so."⁵⁴ "the duty will rarely extend beyond the communication of warnings to the immediate vendee, since, as a practical matter, the vendor has neither the means of controlling the vendee's subsequent actions nor the opportunity to provide warnings directly to the ultimate user."⁵⁵ 	N/A	N/A	No.
Indiana	Yes. ⁵⁶ [Bulk Supplier]	 Consider the "third party's knowledge."⁵⁷ Consider the "reliability of the third party as a conduit of necessary information about the product."⁵⁸ Consider the third party's "control over the environment in which the product is used."⁵⁹ 	 Consider "the dangerous condition of the product."⁶⁰ Consider "the magnitude of the risk involved."⁶¹ 	 Consider "the extent to which the manufacturer could have labeled the product to warn of the danger."⁶² Consider "the burdens imposed on the supplier by requiring that he directly warn all users."⁶³ 	No.
Iowa	Yes. ⁶⁴ [Bulk Supplier]	Consider "whether the supplier acted in a manner reasonably calculated to assure either that the necessary information would be passed on to the ultimate handlers of the product or that their safety would otherwise be attended to." ⁶⁵	Consider "the feasibility of giving direct warnings to all who are entitled to them." ⁶⁶	N/A	No.

	Defense Recognized?	Intermediary Considerations	Product Considerations	Other Considerations	Highest Court
Kansas	Yes. ⁶⁷ [Bulk Manufacturer]	 Intermediary must be "capable of passing on his knowledge to his customers." 68 Manufacturer should "ascertain[] that the distributor to whom he sells is adequately trained, is familiar with the properties of the [product] and safe methods of handling it, and is capable of passing on his knowledge to his customers." 69 	N/A	N/A	Yes. ⁷⁰
Kentucky	Yes. ⁷¹ [Component Part Manufacturer]	N/A	"if a component part is not defective when sold by its manufacturer, then no duty to warn can attach to the component manufacturer." ⁷²	N/A	No.
Louisiana	Unclear. ⁷³	N/A	N/A	N/A	No.
Maine	Probably. ⁷⁴ [Bulk Raw Material Supplier]	N/A	"a supplier of raw material that is not itself defective or inherently dangerous generally is held to possess no duty to warn of dangers arising from the incorporation of the raw material into machinery or other matter." ⁷⁵	N/A	No.

	Defense Recognized?	Intermediary Considerations	Product Considerations	Other Considerations	Highest Court
Maryland	Yes. ⁷⁶ [Bulk Supplier]	 Consider "the form of any warnings given."⁷⁷ Supplier must "reasonably" rely on the intermediary to warn the end user.⁷⁸ Consider "the reliability of the third party as a conduit of necessary information about the product."⁷⁹ "proof that the intermediary knew that the product was dangerous does not, in and of itself, absolve the supplier of a duty to warn ultimate users."⁸⁰ 	 Consider "the dangerous condition of the product."81 Consider "the purpose for which the product is used."82 Consider "the magnitude of the risk involved."83 	 The "manner in which the product is supplied to an intermediary is an important factor to consider when determining whether the defendant reasonably relied on the intermediary to warn ultimate users of the product."84 Consider "the burdens imposed on the supplier by requiring that he directly warn all users."85 	Yes. ⁸⁶
Massachusetts	Yes. ⁸⁷ [Bulk Supplier]	 The "relevant inquiry" of whether the defense applies "turns on the intermediary's knowledge of a product's hazard and its ability to pass on appropriate warnings to end users."88 Consider "the reliability of the third party as a conduit of necessary information about the product."89 	 Consider "the dangerous condition of the product."90 Consider "the purpose for which the product is used."91 Consider "the magnitude of the risk involved."92 	Consider "the burden imposed on the supplier by requiring that he directly warn all users." ⁹³	Yes. ⁹⁴

	Defense Recognized?	Intermediary Considerations	Product Considerations	Other Considerations	Highest Court
Michigan	Yes. ⁹⁵ [Component Part Supplier]	"a component part supplier has no duty, independent of the completed product manufacturer, to analyze the design of the completed product which incorporates its nondefective component part Absent a defect in the component part itself, a component part manufacturer has no duty arising from the application of the part in a completed product."	Defense applies to a " nondefective component part."97	N/A	No.
Minnesota	Yes. ⁹⁸ [Bulk Supplier]	• The "supplier of a material that is delivered in bulk can discharge its duty to warn the end user by warning the buyer of the dangerous condition of the materials."	Consider whether warning every end-user would be "exceedingly costly" or "impossible."	N/A	Yes. ¹⁰³
		 The warning must be "adequate."¹⁰⁰ Reliance on the intermediary must be "reasonable."¹⁰¹ 			
Mississippi	Probably. ¹⁰⁴ [Bulk Supplier]	Suggesting that a "manufacturer's duty to warn may be discharged by providing information of the dangerous propensities of the product to a third person upon whom it can reasonably rely to communicate the information to the ultimate users of the product or those who will be exposed to its hazardous effects." ¹⁰⁵	N/A	N/A	Yes. ¹⁰⁶
Missouri	Yes. ¹⁰⁷ [Bulk Supplier]	 A "bulk supplier may warn its immediate purchaser 'with the intention that such warning be given the ultimate consumer." ¹⁰⁸ A "bulk supplier must provide adequate instructions to the distributor next in line or ascertain that the distributor is informed as to the nature of the product and is in a position to convey the information so that the ultimate consumer is apprised of the dangerous propensity of the product." ¹⁰⁹ 	N/A	The doctrine may not apply to strict liability claims. 110	Yes. ¹¹¹

	Defense Recognized?	Intermediary Considerations	Product Considerations	Other Considerations	Highest Court
Montana	Unclear. ¹¹²	N/A	N/A	N/A	No.
Nebraska	Unclear. ¹¹³	N/A	N/A	N/A	No.
Nevada	Yes. ¹¹⁴ [Bulk Supplier]	 The "relevant question in bulk supplier cases is whether the bulk supplier was objectively reasonable in relying on a knowledgeable intermediary to provide a warning to ultimate users." "This involves proof of two elements: 1) that the bulk supplier was reasonable in believing that the intermediary knew of the dangers associated with the bulk product, and 2) that the bulk supplier was reasonable in relying on the intermediary to warn the ultimate user 	N/A	N/A	No.
New Hampshire	Unclear. ¹¹⁷	of such dangers." ¹¹⁶ N/A	N/A	N/A	No.
New Jersey	Yes. ¹¹⁸ [Component Part Manufacturer]	"Under the doctrine, to impose liability on a component part manufacturer, a plaintiff must allege the following: (1) such defect was caused by the integration of a defective component product into the finished product; or (2) the manufacturer or distributor of the component product substantially participates in the integration of the component product; and (i) the integration of the component causes the product to be defective; and (ii) the resulting defective product is a proximate cause of the harm." 119	N/A	N/A	Yes. ¹²⁰

	Defense Recognized?	Intermediary Considerations	Product Considerations	Other Considerations	Highest Court
New Mexico	Yes. ¹²¹ [Bulk Supplier]	"a bulk supplier is required to warn its immediate purchaser of any known dangers , with the intent that such warning be passed on to the ultimate consumer." 122	 Product cannot be "inherently defective or dangerous at the time it leaves the manufacturer's control."¹²³ Defense applies where "particular product that had been manufactured from a number of component parts and had undergone substantial change."¹²⁴ 	N/A	No.
New York	Yes. [Bulk Supplier]	The "'bulk supplier' doctrine cuts off the manufacturer's liability where '[the manufacturer] adequately warns [its] distributee of the risks and dangers associated with the use of its product."" ¹²⁵	N/A	N/A	No.
North Carolina	Unclear. ¹²⁶	N/A	N/A	N/A	No.
North Dakota	Unclear. ¹²⁷	N/A	N/A	N/A	No.
Ohio	Yes. ¹²⁸ [Bulk Supplier]	"Where a manufacturer raises a bulk supplier/sophisticated user defense, the pivotal question becomes the reasonableness of the supplier's reliance on the intermediary to provide the necessary warning." 129	N/A	N/A	No.
Oklahoma	Yes. ¹³⁰ [Bulk Supplier]	 The doctrine "absolves suppliers of the duty to warn purchasers who are already aware or should be aware of the potential dangers." 131 The defense only applies "when the danger related to the particular product is clearly known to the purchaser." 132 	N/A	N/A	No.

	Defense Recognized?	Intermediary Considerations	Product Considerations	Other Considerations	Highest Court
Oregon	Yes. ¹³³ [Raw Material Supplier]	N/A	Doctrine applies where supplied product was "misapplied rather than defectively designed." 134	Doctrine does not apply "where the plaintiff alleges injurious exposure to a raw material and not to a finished product containing the raw material as a component part." 135	No.
Pennsylvania	Probably not. ¹³⁶	N/A	N/A	N/A	No.
Rhode Island	Yes. ¹³⁷ [Bulk Supplier of Component Parts]	If "the seller or distributor of the component substantially participates in the integration of the component into the design of the product, and the integration of the component causes the product to be defective and the defect in the product causes the harm," then the seller is subject to liability. ¹³⁸	 Manufacturer must be "in the business of selling or otherwise distributing product components." 139 Defense does not apply if component was "defective in itself and the defect causes the harm." 140 	N/A	Yes. ¹⁴¹
South Carolina	Probably. 142 [Bulk Supplier]	 "As long as the supplier has provided satisfactory warnings to a reliable intermediary, it has satisfied its obligations and need not take every measure possible to ensure that the intermediary does in fact warn the ultimate user." 143 Consider "the reliability of the third party as a conduit of necessary information about the product." 144 	 Consider "the dangerous condition of the product."¹⁴⁵ Consider "the purpose for which the product is used."¹⁴⁶ Consider "the magnitude of the risk involved."¹⁴⁷ 	Consider "the burdens imposed on the supplier by requiring that it directly warn all users." ¹⁴⁸	No.

	Defense Recognized?	Intermediary Considerations	Product Considerations	Other Considerations	Highest Court
South Dakota	Yes. ¹⁴⁹ [Raw Material Supplier]	"'raw material suppliers have no duty to warn the ultimate consumer of other companies' finished products if the raw materials have multiple safe uses and are not inherently dangerous." 150	N/A	N/A	No.
Tennessee	Yes. ¹⁵¹ [Component Part Manufacturer]	"we conclude that Tennessee law does support imposition of liability when a component manufacturer substantially participates in the integration of the non-defective component into the design of the final product, if the integration of the component causes the final product to be defective and if the resulting defect causes the harm." 152	"a manufacturer who supplies a non-defective and safe component part generally will not be held liable for a defective or unreasonably dangerous final product." ¹⁵³	N/A	Yes. ¹⁵⁴
Texas	Yes. ¹⁵⁵ [Bulk Supplier]	 "If the bulk supplier may reasonably rely on the intermediary to pass along the warning, it need warn only its intermediate distributor and not each individual consumer." ¹⁵⁶ "In determining whether a bulk supplier may reasonably rely on an intermediary to pass on the warning, courts may consider whether the intermediary is (1) adequately trained, (2) familiar with the properties of the product and its safe use, and (3) capable of passing on its knowledge to consumers." ¹⁵⁷ 	N/A	N/A	Yes. ¹⁵⁸
Utah	Yes. ¹⁵⁹ [Bulk Supplier]	"Liability for a nondefective product under the rule requires two findings. First, the participation by the component supplier in integrating the component into the final product must be substantial . Second, the integration of the nondefective component must cause the integrated product to be defective." ¹⁶⁰	"the bulk supplier defense is available only to supplier's of nondefective products." ¹⁶¹	N/A	Yes. ¹⁶²
Vermont	Unclear. ¹⁶³	N/A	N/A	N/A	No.

	Defense Recognized?	Intermediary Considerations	Product Considerations	Other Considerations	Highest Court
Virginia	Yes. ¹⁶⁴ [Bulk Supplier]	 "[I]f the danger related to the particular product is clearly known to the purchaser/employer, then there will be no obligation to warn placed upon the supplier Stated another way, when the supplier has reason to believe that the purchaser of the product will recognize the dangers associated with the product, no warnings are mandated." 165 Consider whether supplier could "reasonably rely" on the intermediary to convey the warnings. 166 	N/A	N/A	No.
Washington	Yes. ¹⁶⁷ [Bulk Supplier]	 "the bulk seller has no duty to warn the retailer of the dangers of a product if that retailer is already aware 'through common knowledge or learning' of a specific hazard." 68 "distributor had only a duty to insure that the retailer was knowledgeable regarding the dangers and was able to warn the ultimate buyers." 169 	N/A	N/A	Yes. ¹⁷⁰

	Defense Recognized?	Intermediary Considerations	Product Considerations	Other Considerations	Highest Court
West Virginia	Yes. ¹⁷¹ [Bulk Supplier]	 Consider "the form of any warnings given" to the intermediary.¹⁷² Consider "the reliability of the third party as a conduit of necessary information about the product."¹⁷³ 	 Consider "the dangerous condition of the product."¹⁷⁴ Consider "the purpose for which the product is used."¹⁷⁵ Consider "the magnitude of the risk involved."¹⁷⁶ "The status of the manufacturer as a bulk supplier is an independent factor that must be considered in applying" the doctrine.¹⁷⁷ 	 Consider "the burdens imposed on the supplier by requiring that he directly warn all users." 178 Defense may be "inapplicable in situations where members of the public are unintentionally exposed to hazardous chemicals." 179 	No.
Wisconsin	Probably. ¹⁸⁰ [Bulk Supplier]	Consider whether the supplier had " effective means of communicating that warning" to the end user. ¹⁸¹	N/A	N/A	No.
Wyoming	Unclear. ¹⁸²	N/A	N/A	N/A	No.
District of Columbia	Unclear. ¹⁸³	N/A	N/A	N/A	No.
Guam	Unclear. ¹⁸⁴	N/A	N/A	N/A	No.
Northern Mariana Islands	Unclear. ¹⁸⁵	N/A	N/A	N/A	No.
Puerto Rico	Unclear. ¹⁸⁶	N/A	N/A	N/A	No.

	Defense Recognized?	Intermediary Considerations	Product Considerations	Other Considerations	Highest Court
Virgin Islands	Yes. ¹⁸⁷ [Bulk Supplier]	 Consider "the form of any warnings given" to the intermediary. 188 Consider "the reliability of the third party as a conduit of necessary information about the product." 189 	 Consider "the dangerous condition of the product."¹⁹⁰ Consider "the purpose for which the product is used."¹⁹¹ Consider "the magnitude of the risk involved."¹⁹² 	Consider "the burdens imposed on the supplier by requiring that he directly warn all users." ¹⁹³	No.

¹ Purvis v. PPG Indus., Inc., 502 So. 2d 714, 720 (Ala. 1987).

² In this exhibit, the **bold** in any quotation has been added for emphasis.

³ *Purvis*, 502 So. 2d at 722.

⁴ *Id*.

⁵ No authority located.

⁶ Anguiano v. E.I. DuPont de Nemours and Co., Inc., 808 F. Supp. 719, 725 (D. Ariz. 1992), aff'd sub nom. Anguiano v. E.I. Du Pont De Nemours & Co., Inc., 44 F.3d 806 (9th Cir. 1995).

⁷ *Id*.

⁸ *Id*.

⁹ Davis v. Goodyear Tire & Rubber Co., 2010 WL 1710001, at *3 (E.D. Ark. Apr. 26, 2010) ("Plaintiff argues that the Arkansas Supreme Court in Walker did not 'adopt' the component-parts doctrine. This may be true. However, the Arkansas court applied the doctrine to the facts of the case.").

 $^{^{10}}$ *Id.* at *2.

¹¹ *Id*.

¹² Wagner v. Gen. Motors Corp., 370 Ark. 268, 276, 258 S.W.3d 749, 756 (2007) (applying but not adopting "component-parts doctrine").

¹³ Webb v. Special Elec. Co., 63 Cal. 4th 167, 184, 370 P.3d 1022, 1032 (2016).

 $^{^{14}}$ *Id*.

¹⁵ *Id*

¹⁶ *Id*.

¹⁷ Webb, 63 Cal. 4th at 185, 370 P.3d at 1033.

¹⁸ *Id*.

¹⁹ Vista Resorts, Inc. v. Goodyear Tire & Rubber Co., 117 P.3d 60, 71 (Colo. App. 2004) (noting that Colorado jury instructions "do not encourage special instructions for component-part manufacturers").

²⁰ LaMontagne v. E.I. Du Pont De Nemours & Co., 41 F.3d 846, 857 (2d Cir. 1994) (applying Connecticut law).

²¹ *Id*.

²² *Id.* at 856.

²³ *Id.* at 857.

²⁴ Cropper v. Rego Distrib. Ctr., Inc., 542 F. Supp. 1142, 1156 (D. Del. 1982) (applying Delaware law).

²⁵ *Id*.

²⁶ *Id*.

²⁷ Union Carbide Corp. v. Kavanaugh, 879 So. 2d 42, 43-44 (Fla. Dist. Ct. App. 2004) (analyzing "the issue of bulk supplier liability" through the "learned intermediary doctrine").

²⁸ *Id.* at 44.

²⁹ *Id*.

³⁰ *Id.* at 45.

³¹ *Id*.

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^{32} Id.
<sup>33</sup> Id.
^{34} Id.
<sup>35</sup> But see Aubin v. Union Carbide Corp., 177 So. 3d 489, 495 (Fla. 2015) (discussing intermediary doctrines generally under Florida law and citing Union Carbide
Corp. v. Kavanaugh, 879 So. 2d 42, 44 (Fla. Dist. Ct. App. 2004) with approval).
<sup>36</sup> Carter v. E.I. DuPont de Nemours & Co., 217 Ga. App. 139, 142 (1995) (addressing when "supplier's duty to warn an ultimate consumer can be discharged by a
warning given to an intermediary party" in case of bulk supplier but referring to "learned intermediary" doctrine); see also Giordano v. Ford Motor Co., 165 Ga.
App. 644, 644-45, 299 S.E.2d 897, 898-99 (Ga. Ct. App. 1983) (on liability for component parts manufacturer).
<sup>37</sup> Carter, 217 Ga. App. at 142.
^{38} Id.
<sup>39</sup> Id.
<sup>40</sup> Id.
<sup>41</sup> Id.
<sup>42</sup> Kealoha v. E.I. du Pont de Nemours & Co., 82 F.3d 894, 901-02 (9th Cir. 1996) ("Therefore, it was not unreasonable for the district court to conclude that the
Hawaii Supreme Court would apply the bulk supplier doctrine in favor of DuPont.").
<sup>43</sup> Id.
<sup>44</sup> Id.
<sup>45</sup> Id.
<sup>46</sup> Id.
<sup>47</sup> Id.
<sup>48</sup> Id.
<sup>49</sup> Sliman v. Aluminum Co. of Am., 112 Idaho 277, 281-82, 31 P.2d 1267, 1271-72 (1986).
<sup>50</sup> Id.
<sup>51</sup> Id.
<sup>52</sup> Id.
<sup>53</sup> Venus v. O'Hara, 127 Ill. App. 3d 19, 20-21, 24-25, 468 N.E.2d 405, 408-09 (recognizing limited duties of "bulk distributors"); see also Manning v. Ashland Oil
Co., 721 F.2d 192, 194 (7th Cir. 1983) (discussing duties of bulk suppliers under Illinois law).
<sup>54</sup> Id.
<sup>55</sup> Id. at 24-25.
<sup>56</sup> Baker v. Monsanto Co., 962 F. Supp. 1143, 1150-51 (S.D. Ind. 1997) (considering "knowledgeable and sophisticated bulk purchaser' defense" under Indiana
law).
<sup>57</sup> Id.
<sup>58</sup> Id.
<sup>59</sup> Id.
<sup>60</sup> Id.
<sup>61</sup> Id.
<sup>62</sup> Id.
<sup>63</sup> Id.
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<sup>64</sup> Stoffel v. Thermogas Co., 998 F. Supp. 1021, 1027 (N.D. Iowa 1997) ("While the Iowa Supreme Court has not explicitly approved the 'bulk supplier' defense by
name, . . . this Court concludes that the Iowa Supreme Court has in fact adopted that defense.").
<sup>65</sup> Id. at 1026.
<sup>66</sup> Id.
<sup>67</sup> Jones v. Hittle Serv., Inc., 219 Kan, 627, 639, 549 P.2d 1383, 1394 (1976).
<sup>68</sup> Id.
<sup>69</sup> Id.
<sup>70</sup> Id.
<sup>71</sup> Vaughn v. Konecranes, Inc., 2014 WL 4956266, at *3 (E.D. Ky. Oct. 2, 2014) (applying Kentucky law).
<sup>72</sup> Id. (internal quotation marks omitted).
<sup>73</sup> No authority located.
<sup>74</sup> Unicomp, Inc. v. Elementis Pigments, Inc., 1999 WL 1995400, at *19 (D. Me. Feb. 10, 1999) (predicting that Maine would adopt the "bulk raw material"
supplier" doctrine).
^{75} Id.
<sup>76</sup> Eagle-Picher Indus., Inc. v. Balbos, 326 Md. 179, 218-19, 604 A.2d 445, 464 (1992) (referring to "sophisticated user" defense applicable to, among others,
"bulk suppliers").
<sup>77</sup> Id.
^{78} Id.
<sup>79</sup> Id.
<sup>80</sup> Id.
<sup>81</sup> Id.
<sup>82</sup> Id.
<sup>83</sup> Id.
<sup>84</sup> Id.
<sup>85</sup> Id.
<sup>86</sup> Id.
<sup>87</sup> Hoffman v. Houghton Chem. Corp., 434 Mass. 624, 630-31, 751 N.E.2d 848, 854-55 (2001).
<sup>88</sup> Id.
<sup>89</sup> Hoffman, 434 Mass. at 632, 751 N.E.2d at 856.
<sup>90</sup> Id.
<sup>91</sup> Id.
<sup>92</sup> Id.
<sup>93</sup> Id.
<sup>94</sup> Id.
95 Citizens Ins. Co. of Am. v. Sears Roebuck and Co., 203 F. Supp. 2d 837, 846 (W.D. Mich. 2002) (applying Michigan law).
<sup>96</sup> Id.
<sup>97</sup> Id.
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⁹⁸ Gray v. Badger Mining Corp., 676 N.W.2d 268, 280 (Minn. 2004) (discussing the "bulk supplier defense" as "a specialized version of the sophisticated intermediary defense").

⁹⁹ *Id*.

¹⁰⁰ *Id*.

 101 *Id*.

 102 *Id*.

 103 *Id*.

¹⁰⁴ Swan v. I.P., Inc., 613 So. 2d 846, 855 (Miss. 1993) (acknowledging but not adopting the "bulk seller doctrine").

¹⁰⁵ *Id.* at 853.

¹⁰⁶ *Id*.

¹⁰⁷ Donahue v. Phillips Petroleum Co., 866 F.2d 1008, 1012 (8th Cir. 1989) (citing Morris v. Shell Oil Co., 467 S.W.2d 39, 42 (Mo. 1971)); see also Mo. Rev. Stat. Ann. § 537.762 (defense for "defendant whose liability is based solely on his status as a seller in the stream of commerce").

¹⁰⁸ *Donahue*, 866 F.2d at 1012.

¹⁰⁹ *Id*.

¹¹⁰ Menschik v. Mid-Am. Pipeline Co., 812 S.W.2d 861, 864 (Mo. Ct. App. 1991).

¹¹¹ *Morris v. Shell Oil Co.*, 467 S.W.2d 39, 42 (Mo. 1971).

¹¹² No authority located.

113 *Cf. Vondra v. Chevron U.S.A.*, *Inc.*, 652 F. Supp. 2d 999, 1008 (D. Neb. 2009) ("Defendants' arguments are an amalgam of the 'sophisticated user,' 'bulk supplier,' and 'learned intermediary' defenses. The parties contend that resolution of this issue requires the court to determine whether Nebraska courts have adopted, or are likely to adopt this defense or defenses. The court finds, however, that it need not make that determination because even if such a defense is available in Nebraska, the defendants have not presented evidence that shows, as a matter of law, that they are entitled to the defense.").

¹¹⁴ Forest v. E.I. DuPont de Nemours & Co., 791 F. Supp. 1460, 1465 (D. Nev. 1992) ("The court is confident that if faced with the issue, the Nevada Supreme Court would adopt some form of the bulk supplier doctrine.").

¹¹⁵ *Id.* at 1466.

¹¹⁶ *Id*.

¹¹⁷ No authority located.

118 Flint Group Packaging Inks N.A. Corp. v. Fox Industries Inc., 2020 WL 6156750, at *11 (D.N.J. Oct. 20, 2020) (applying New Jersey law).

¹¹⁹ *Id*.

¹²⁰ Zaza v. Marquess and Nell, Inc., 675 A.2d 620, 629, 633-36 (N.J. 1996) (discussing defense).

¹²¹ Parker v. E.I. DuPont de Nemours & Co., 1995-NMCA-086, ¶ 25, 121 N.M. 120, 128, 909 P.2d 1, 9.

¹²² *Id*.

¹²³ Parker, 1995-NMCA-086, ¶ 16, 121 N.M. at 126, 909 P.2d at 7.

¹²⁴ Parker, 1995-NMCA-086, ¶ 25, 121 N.M. at 128, 909 P.2d at 9.

¹²⁵ Sherman v. A.J. Pegno Constr. Corp., 528 F. Supp. 2d 320, 327 (S.D.N.Y. 2007) (applying New York law).

¹²⁶ Leonard v. Bed, Bath & Beyond, Inc., 2015 WL 9582425, at *2 (E.D.N.C. Dec. 30, 2015) (recognizing the "absence of any North Carolina or Fourth Circuit case on point" regarding the "component seller doctrine").

¹²⁷ Veil v. Vitek, Inc., 803 F. Supp. 229, 234 (D.N.D. 1992) ("Although not specifically recognized in North Dakota, other jurisdictions have adopted what has become known as the bulk supplier doctrine.").

¹²⁸ Midwest Specialties, Inc. v. Crown Indus. Prod. Co., 940 F. Supp. 1160, 1165 (N.D. Ohio 1996), aff'd, 142 F.3d 435 (6th Cir. 1998).

¹²⁹ *Id*.

¹³⁰ *Tate v. Statco Eng'g & Fabricators, Inc.*, 2013 WL 6185476, at *6 (E.D. Okla. Nov. 25, 2013) (discussing "sophisticated purchaser exception, also referred to as the bulk supplier defense" under Oklahoma law).

¹³¹ *Id*.

 $^{^{132}}$ *Id*.

¹³³ Griffin v. Allis-Chalmers Corp. Prod. Liab. Tr., 240 Or. App. 137, 145, 246 P.3d 483, 486 (2010) (interpreting "raw material supplier" doctrine).

 $^{^{134}}$ *Id*.

¹³⁵ *Id*.

¹³⁶ Phillips v. A.P. Green Refractories Co., 428 Pa. Super. 167, 185, 630 A.2d 874, 884 (1993), aff'd sub nom. Phillips v. A-Best Prod. Co., 542 Pa. 124, 665 A.2d 1167 (1995) (applying "sophisticated user/bulk supplier doctrine"); Amato v. Bell & Gossett, 116 A.3d 607, 624 (Pa. Super. Ct. 2015) (treating Phillips as dicta and stating that "the sophisticated user defense has never been adopted in Pennsylvania").

¹³⁷ *Gray v. Derderian*, 365 F. Supp. 2d 218, 235 (D.R.I. 2005) (interpreting the "bulk supplier doctrine" as set forth in Section 5 of the Restatement (Third) of Torts.).

¹³⁸ *Id*.

 $^{^{139}}$ *Id*.

¹⁴⁰ *Id*.

¹⁴¹ Id. (interpreting the Rhode Island Supreme Court to have adopted the "bulk supplier doctrine" in Buonanno v. Colmar Belting Co., 733 A.2d 712 (R.I.1999)).

¹⁴² Coffey v. Chem. Specialties, Inc., 4 F.3d 984, 1993 WL 318886, at *3 (4th Cir. 1993) (unpublished table decision) ("The district court, while relying upon 'admittedly wavering guidance' from state law, concluded that a South Carolina court facing the issue would recognize the bulk supplier defense. We agree with this assessment."); In re TMJ Implants Products Liab. Litig., 872 F. Supp. 1019, 1031 (D. Minn. 1995), aff'd sub nom. In re Temporomandibular Jt. (TMJ) Implants Products Liab. Litig., 97 F.3d 1050 (8th Cir. 1996) (discussing Coffey).

¹⁴³ Coffey, 4 F.3d 984, 1993 WL 318886, at *4.

¹⁴⁴ *Id.* at *3.

¹⁴⁵ *Id*.

¹⁴⁶ *Id*.

¹⁴⁷ *Id*.

¹⁴⁸ *Id*.

¹⁴⁹ Berg v. Johnson & Johnson, 2013 WL 1739534, at *2 n.3, 5 (D.S.D. Mar. 25, 2013) (predicting "that the South Dakota Supreme Court would apply the raw material supplier doctrine to the facts of this case" and noting that the doctrine has alternatively been called the "bulk supplier doctrine" and "component part doctrine.").

¹⁵⁰ *Id.* at *3.

¹⁵¹ Davis v. Komatsu Am. Indus. Corp., 42 S.W.3d 34, 35 (Tenn.), opinion after certified question answered, 19 F. App'x 253 (6th Cir. 2001) (adopting "component parts doctrine"); see also Jacobs v. E.I. du Pont de Nemours & Co., 67 F.3d 1219, 1243 (6th Cir. 1995) (discussing "bulk supplier/sophisticated intermediary rule" under Tennessee law).

¹⁵² *Davis*, 42 S.W.3d at 42.

¹⁵³ *Id.* at 38.

¹⁵⁴ *Id*.

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<sup>155</sup> Seifried v. Hygenic Corp., 410 S.W.3d 427, 432 (Tex. App. 2013).
<sup>156</sup> Id.
<sup>157</sup> Id.
<sup>158</sup> Alm v. Aluminum Co. of Am., 717 S.W.2d 588, 592 (Tex. 1986).
159 Riggs v. Asbestos Corp. Ltd., 2013 UT App 86, ¶ 1, 19-20, 304 P.3d 61, 63, 68 (analyzing "raw material supplier rule," alternatively called the "bulk supplier
defense").
<sup>160</sup> Id. (internal quotation marks and brackets omitted).
<sup>161</sup> Id
<sup>162</sup> Gudmundson v. Del Ozone, 2010 UT 33, ¶ 62, 232 P.3d 1059, 1073-74 (adopting the "component-parts doctrine").
<sup>163</sup> Wilson v. Glenro, Inc., 2012 WL 1005007, at *9 n.3 (D. Vt. Mar. 23, 2012), aff'd, 524 F. App'x 739 (2d Cir. 2013) (declining to decide whether "Vermont will
adopt the component parts doctrine").
<sup>164</sup> Fisher v. Monsanto Co., 863 F. Supp. 285, 287 (W.D. Va. 1994) (applying the "sophisticated purchaser and bulk supplier defenses").
<sup>165</sup> Id.
<sup>166</sup> Id. at 289.
<sup>167</sup> Zamora v. Mobil Corp., 104 Wash. 2d 199, 205, 704 P.2d 584, 588 (1985) (en banc).
^{168} Id.
<sup>169</sup> Id.
<sup>170</sup> Id.
<sup>171</sup> Ronev v. Gencorp, 654 F. Supp. 2d 501, 507 (S.D.W. Va. 2009) ("The Court FINDS that West Virginia courts would adopt the bulk supplier defense[.]").
^{172} Id.
<sup>173</sup> Id.
<sup>174</sup> Id.
<sup>175</sup> Id.
<sup>176</sup> Id.
<sup>177</sup> Id.
^{178} Id.
<sup>179</sup> Good v. Am. Water Works Co., Inc., 2016 WL 5402238, at *4-5 (S.D.W. Va. Sept. 26, 2016) (After noting that the "bulk supplier" doctrine is "closely related"
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- ¹⁷⁹ Good v. Am. Water Works Co., Inc., 2016 WL 5402238, at *4-5 (S.D.W. Va. Sept. 26, 2016) (After noting that the "bulk supplier" doctrine is "closely related" to the "sophisticated user" doctrine, writing: "the court believes that the sophisticated user doctrine is inapplicable in situations where, as here, members of the public are unintentionally exposed to hazardous chemicals.").
- ¹⁸⁰ Burton v. Am. Cyanamid, 334 F. Supp. 3d 949, 964 (E.D. Wis. 2018) ("Sellers of bulk materials to manufacturers of finished products often have no mechanism to reach the end user of the product with warnings. Though the Wisconsin Supreme Court has not ruled on the issue [of the bulk supplier doctrine], courts in the state have recognized that bulk suppliers' duties to warn are limited by this practical reality.").
- ¹⁸¹ *Id*.
- ¹⁸² No authority located.
- ¹⁸³ No authority located.
- ¹⁸⁴ No authority located.
- ¹⁸⁵ No authority located.
- ¹⁸⁶ No authority located.

¹⁸⁸ *Id*.

189 *Id*. 190 *Id*. 191 *Id*. 192 *Id*.

¹⁹³ *Id*.

¹⁸⁷ Martin v. S.C. Johnson & Sons, Inc., 1996 WL 165039, at *5 (D.V.I. Mar. 21, 1996), aff'd sub nom. Martin v. S.C. Johnson & Son, Inc., 107 F.3d 7 (3d Cir. 1997) (unpublished table decision) (discussing "knowledgeable purchaser defense" as it pertains to bulk supplier).

CERTIFICATE OF SERVICE

I certify that on December 14, 2020 a true and correct copy of the foregoing was electronically filed with the Clerk of the United States District Court of the Southern District of Ohio, using the CM/ECF system, which will send notification of such filing to all counsel of record at the email addresses that they have provided to the Court.

/s/ Theodore M. Grossman

On Behalf of the Above-Signed Attorneys for Defendants